Valley Water

FY 2021–25

Capital Improvement Program

Santa Clara Valley Water District

Fiscal Years 2021-25
Capital Improvement Program

BOARD OF DIRECTORS

Nai Hsueh
Chair, District 5

John L. Varela
District 1

Barbara F. Keegan
District 2

Richard P. Santos
District 3

Linda J. LeZotte
District 4

Tony Estremera
Vice Chair District 6

Gary Kremen
District 7

Submitted by

Norma J. Camacho
Chief Executive Officer

Presented by

Christopher Hakes
Deputy Operating Officer

June 30, 2020

Valley Water
Clean Water • Healthy Environment • Flood Protection

Table of Contents

OVERVIEW

Overview I-1
Alignment with Ends Policies I-2
CIP Planning Process I-2
Fiscal Year 2021-25 CIP Summary I-6

WATER SUPPLY CAPITAL IMPROVEMENTS

Water Supply Overview II-1
CIP Planning Process and Financial Analysis II-2
Water Supply Capital Improvements II-6
Water Supply Funding Source II-7
Water Supply Project Pages
- Storage Facilities II-9
- Transmission Facilities II-27
- Treatment Facilities II-53
- Recycled Water Facilities II-69

FLOOD PROTECTION CAPITAL IMPROVEMENTS

Flood Protection Overview III-1
CIP Planning Process and Financial Analysis III-2
Flood Protection Capital Improvements & Funding Sources III-5
Flood Protection Project Pages
- Lower Peninsula Watershed III-7
- West Valley Watershed III-13
- Guadalupe Watershed III-15
- Coyote Watershed III-21
- Uvas/Llagas Watershed III-35
- Multiple Watersheds III-39

WATER RESOURCES STEWARDSHIP CAPITAL IMPROVEMENTS

Water Resources Stewardship Overview IV-1
CIP Planning Process and Financial Analysis IV-2
Water Resources Stewardship Capital Improvements & Funding Sources IV-3
Water Resources Stewardship Project Pages
- Environmental Enhancements & Stewardship
  - Lower Peninsula Watershed IV-5
  - Guadalupe Watershed IV-9
  - Coyote Watershed IV-11
  - Multiple Watersheds IV-13
- Feasibility Studies IV-21
- Mitigation IV-23

Table of Contents

BUILDINGS AND GROUNDS CAPITAL IMPROVEMENTS

Buildings and Grounds Overview V-1
CIP Planning Process and Financial Analysis V-1
Buildings and Grounds Capital Improvements & Funding Sources V-2
Buildings and Grounds Projects Pages V-3

INFORMATION TECHNOLOGY CAPITAL IMPROVEMENTS

Information Technology Overview VI-1
CIP Planning Process and Financial Analysis VI-1
Information Technology Capital Improvements & Funding Sources VI-2
Information Technology Projects Pages VI-3

FINANCIAL PLANNING AND SUMMARY

CIP Financial Planning VII-1
CIP Funding Summary VII-5
Project Funding Schedules
- Water Utility Enterprise Fund VII-6
- Watershed and Stream Stewardship Fund VII-8
- Safe, Clean Water and Natural Flood Protection Fund VII-9
- General Fund VII-10
- Information Technology Fund VII-10
- All Funds VII-10

APPENDICES

Appendix A – Valley Water Partnership Summary List VIII-1
Appendix B – Summary of Capital Expenditures VIII-5
Appendix C – Safe Clean Water Project Schedules VIII-7
Appendix D – Glossary VIII-9

Overview

Overview

OVERVIEW

The Santa Clara Valley Water District's (Valley Water) Fiscal Year (FY) 2021-25 Five-Year Capital Improvement Program (CIP) is a projection of Valley Water's capital funding for planned capital projects from FY 2020-21 through FY 2024-25. The purpose of the CIP is to document planned Valley Water projects to help integrate Valley Water work with the larger community by aligning Valley Water planning with other local agency planning efforts.

Valley Water's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within Valley Water boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water-related infrastructure to meet the needs of Santa Clara County.

Mission

SANTA CLARA VALLEY WATER

The mission of Valley Water is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officers Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and the California Public Contract Code definition of public works. They exceed $50,000 in cost, have long- term life spans and are generally nonrecurring. They usually fall within one of the following six categories:

1. Acquisition of land for public purpose;
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building;
3. Addition to or expansion of an existing facility;
4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than $50,000;
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories;
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than $2.5 million;
2. Project can be completed within 2 fiscal years;
3. Rights-of-way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Facility Management, Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by Valley Water that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of vehicles and large equipment.

Overview

ALIGNMENT WITH ENDS POLICIES

Valley Water plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under Valley Water's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by Valley Water staff. The Executive Limitations balance the Ends Policies and set limits on staff activities in fulfilling them.

Program plans, master plans and the asset management plan are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operations staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Some high-profile feasibility studies are included in the CIP. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures Valley Water's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP:

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations."
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
  - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
  - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

CIP PLANNING PROCESS

Valley Water conducts an annual planning process for its CIP. The purpose of the CIP Planning Process is to ensure the capital projects included in the CIP:

- Meet the Board's priorities and contribute to the objectives of Valley Water's various programs;
- Have identified funding for the duration of the projects; and
- Are coordinated with the local jurisdiction's General Plans.

The CIP Planning Process is carried out in accordance with the following Executive Limitations:

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are aligned with the Board's capital priorities."

The annual CIP Process is the responsibility of the CIP Group comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans;
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution;
- Review of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities;
- Financial analysis, to determine the capacity of Valley Water's capital funding sources to fund the proposed capital projects;

- Review of impacts the completed capital project will have on the Operations and Maintenance (O&M) resources.
- Outreach to local jurisdictions with land use authority, within Santa Clara County, to coordinate Valley Water's Capital Improvement Program with their General Plans;
- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities; and
- Board adoption of the CIP plan.

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, and together with other long-term planning efforts of Valley Water, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the Draft CIP is being reviewed by the cities and County, the budget is reviewed and finalized. The Board concludes the outreach on the Draft CIP with a public hearing. The first year of the CIP is reconciled with the budget; The Resolution to adopt the CIP and the budget are presented to the Board for approval in May.

Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the CIP. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board for review and input on multiple occasions throughout the development process. Early in the validation process the list of newly proposed projects is presented to the Board so they can provide direction to staff, followed by Board workshops to review the Preliminary CIP to ensure that the document is developed in accordance with Board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review.
Following a public hearing, the Board approves the resolution to adopt the Final CIP in May.

The Board CIP Committee meets throughout the year to review and discuss information related to the development and implementation of the CIP and provide input to staff. The Committee provides recommendations on issues ranging from project implementation, to resource utilization and funding sources or distribution. The Committee's recommendations are presented to the Board for direction on incorporation into the CIP document or implementation by staff.

On January 14, 2020 the FY 2021-25 Preliminary CIP project list was reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2021-25 CIP:

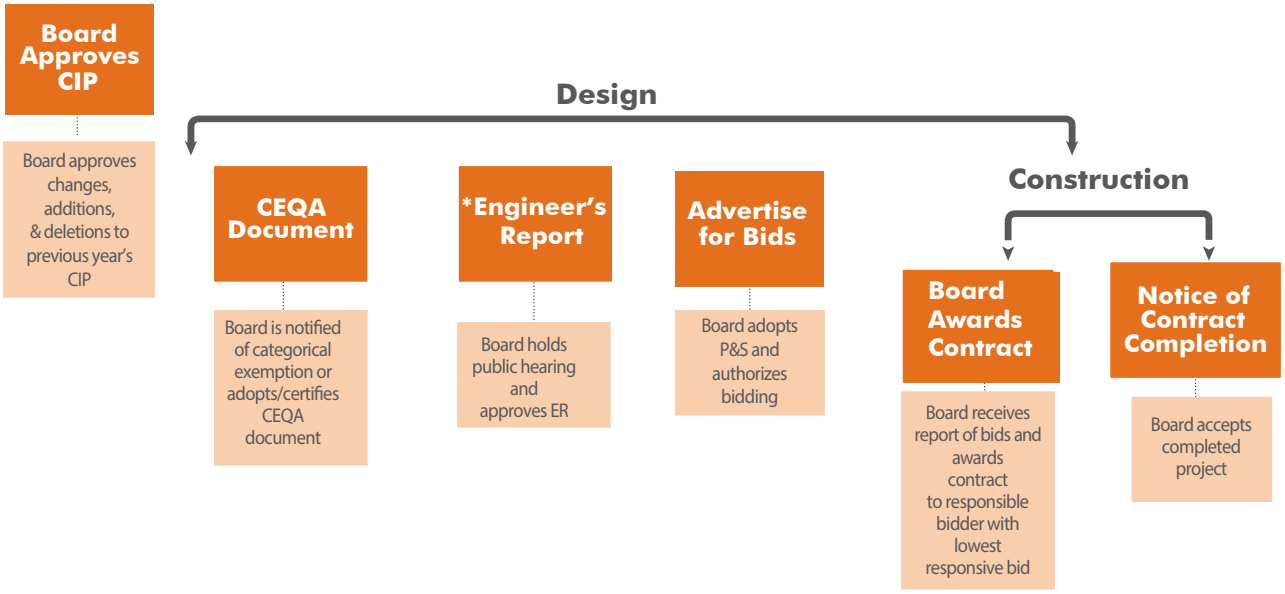
- To fully fund the Water Supply projects in the FY 2021-25 CIP, staff initially proposed increases in groundwater production charges of up to 8.6% in North County Zone W-2 and 9.4% in South County Zone W-7 and a reduction of no more than 2.9% for the modified South County Zone W-5 and 32% for the new South County Zone W-8 in FY 2020-21. In light of the economic crisis spurred on by the COVID-19 Pandemic, Valley Water's Board of Directors directed staff to implement a 0% increase to the existing rates for North County Zone W-2 and South County Zone W-7. Staff will return mid-year FY 2021 with updates regarding the local economic situation to determine if a rate adjustment is feasible at that time.
- Five new Water Supply projects with a combined value of $120.9 million were added to the CIP. They are; Land Rights – South County Recycled Water Pipeline Project, Almaden Valley Pipeline Replacement Project, SCADA Implementation Project; Water Treatment Plant Implementation Project, and Distribution System Implementation Project.
- The Los Gatos Creek Restoration and Flood Protection Project (Safe, Clean Water Program Priority D, Project D6) had been added to the FY 2020-24 CIP with $9M in funding, but was removed this year because the landowner Google, Inc. is not proceeding with a flood protection and stream restoration project that aligns with the Safe, Clean

Water Project D6 Key Performance Indicator and therefore cannot receive Safe, Clean Water Program funds.

- The Guadalupe River, Tasman Drive to I-880 Project was approved by the Board for inclusion in the FY 2020-24 CIP with $1 million in funding for planning. Project funding has increased in the FY 2021-25 CIP to $99 million to reflect all future planning, design and construction costs to restore design flow conveyance capacity.
- The Palo Alto Flood Basin Tide Gate Structure Improvement Project increased in cost by $20 million due to increased construction phase cost estimates.
- The Upper Llagas Creek Flood Protection Project increased by $60 million to correctly reflect future year funding requirements. Funding sources have been updated to reflect the pursuit of outside funding from the Natural Resource Conservation Service.
- The South San Francisco Bay Shoreline Project Phase 1 increased in cost by $49M due to costs for right of way acquisition, levee soil acquisition, and construction of ecotone that were not included in the original estimated project cost.

Projects in the CIP are typically divided up into planning, design and construction phases. The Board may determine not to implement a project based on various considerations, such as financial constraints, environmental impacts, Operations and Maintenance, or community desire during a project's planning or design phases. The Board has various opportunities to provide direction and approval of capital projects as shown in the graphic below.

OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



** Board approval of the Engineer's Report is required only on projects with zone funding.*

CIP PROCESS ALIGNMENT WITH ENDS POLICIES

Ends Policy E-2
There is a reliable, clean water supply for current and future generations.

→ **Program Plans or Master Plans**
- **1990** SCVWD Action Plan for reducing disinfection by-product (Board approved)
- Integrated Water Resource Plan (Board Work Studies)
- **1999** Producer-Wholesaler Agreement for Supply of Recycled Water between SCRWA and Valley Water (Board approved)
- **2004** Valley Water Asset Management Program Implementation Plan
- **2005** Urban Water Management Plan (Board approved)
- **2005** Dam Safety Plan
- **2005** Water Infrastructure Reliability Plan
- **2006** South County Water Recycling MasterPlan (Board approved)
- **2012** Safe, Clean Water Program (Board/Voter approved)
- **2012** Water Supply Infrastructure Master Plan (Board approved)
- **2013** Recycled Water Master Plan (City of Sunnyvale)
- **2014** South Bay Water Recycling Strategic Master Plan
- **2019** Water Supply Master Plan Update (Board Approved)

→ **FY 2021-2025 CIP**
- **31 Water Supply Capital Projects**

Ends Policy E-3.1 & E-3.2
Provide natural flood protection for residents, businesses, and visitors. Reduce potential for flood damages.

→ **Program Plans or Master Plans**
- **1982, 1986, 1990** Benefit Assessment Program (Board approved)
- **2000** Clean, Safe Creek Program (Board/Voter approved)
- **2001** Stream Maintenance Program (Board approved) Annual Watershed Facility Inspection Program (for all watersheds)
- Feasibility Cost Sharing Agreements with the US Army Corps of Engineers
- **2012** Safe, Clean Water Program (Board/Voter approved)

→ **FY 2021-2025 CIP**
- **17 Flood Protection Capital Projects**

Ends Policy E-4
There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County.

→ **Program Plans or Master Plans**
- CEQA commitments
- Regulatory permitting commitments
- Enhancement Program per Clean Safe Creeks Program (Board/Voter approved)
- Enhancement opportunities determined appropriate by the Board
  - Fish and Aquatic Habitat Collaborative Effort
  - Natural Resource Damage Assessment
  - Other
- **2012** Safe, Clean Water Program (Board/Voter approved)

→ **FY 2021-2025 CIP**
- **10 Water Resources Stewardship Projects**

Strategic Support

→ **Program Plans or Master Plans**
- **1990** Facilities Master Plan - Site Analysis Report (Board approved)
- **2005** Needs Assessment and Plan Feasibility Study
- **2012** Campus Master Plan (Board approved)

→ **FY 2021-2025 CIP**
- **2 Buildings and Grounds Capital Projects**

Strategic Support

→ **Program Plans or Master Plans**
- **2001** Information System Master Plan
- **2003** Enterprise-wide Master Communication Plan
- **2012** Information Systems Master Plan

→ **FY 2021-2025 CIP**
- **7 Information Technology Capital Projects**

New Project Validation, CIP Review and Financial Analyses

FISCAL YEAR 2021-25 CIP SUMMARY

The recommended CIP for FY 2021-25 includes 67 priority projects to implement the goals and objectives of Valley Water's program plans and master plans. These projects are grouped into five types of improvements:

- *Water Supply Capital Improvements*
  31 projects contributing to Ends Policy E-2
- *Flood Protection Capital Improvements*
  17 projects contributing to Ends Policy E-3
- *Water Resources Stewardship Capital Improvements*
  10 projects contributing to Ends Policy E-4
- *Buildings and Grounds Capital Improvements*
  2 projects supporting Valley Water efforts to achieve the Ends Policies
- *Information Technology Capital Improvements*
  7 projects supporting Valley Water efforts to achieve the Ends Policies

Each of the 67 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for Valley Water are: property taxes; a special parcel tax, which funds the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program); and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. Valley Water continues to receive a small amount of revenue from benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

Valley Water aggressively pursues external funding to supplement its principal revenue when practical. For a complete listing of grants and partnerships see Appendix A.

A number of Valley Water projects are receiving substantial State funding through grants:

- $25 million for Lower Silver Creek and Cunningham Flood Detention from DWR;
- $485 million for Pacheco Reservoir from the California Water Commission;
- $30 million for Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR; and
- $61.5 million for South San Francisco Bay Shoreline Phase 1 Project from the San Francisco Bay Restoration Authority.

VALLEY WATER PRIORITIES	Valley Water Funds				
Type of Improvement	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
Water Supply	●			●	
Flood Protection		●		●	
Water Resources Stewardship	●	●		●	
Buildings and Grounds			●		
Information Technology	●				●

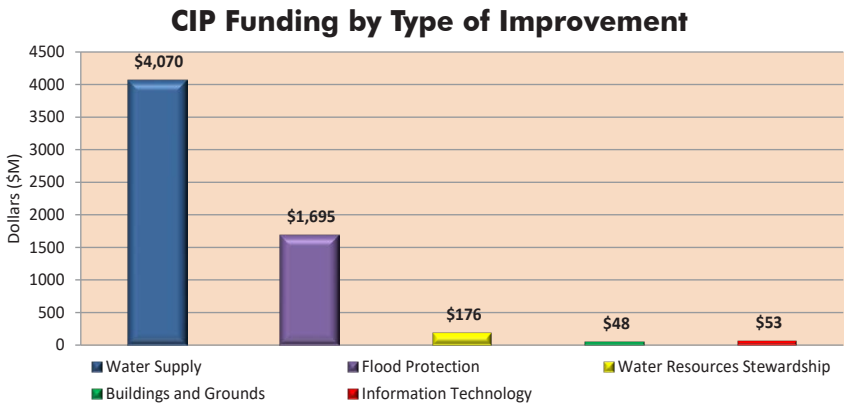
This chart identifies which types of improvement are associated with each of Valley Water's five capital funds.

Overview

The estimated total funding required to implement the 67 projects defined in the CIP is $6.520 billion. Valley Water has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the $6.520 billion total funding, $1.218 billion is expected from Valley Water's various partners, such as the U.S. Army Corps of Engineers (USACE), and $5.302 billion from Valley Water. A list of projects that are funded cooperatively with Valley Water's partners is summarized in Appendix A. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed (cost-sharing agreements or in-kind services), or
- Funds that are reimbursed by the partners after Valley Water advances the needed funds.

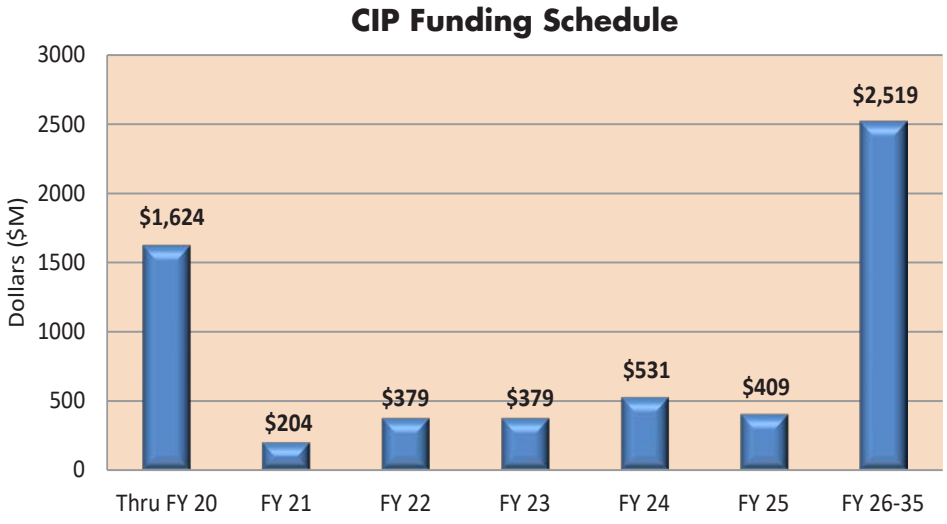
Of the $1.218 billion that is expected from Valley Water's partners, $742 million is advanced by Valley Water and reimbursed later. This $742 million is included in the CIP, and increases Valley Water's total funding requirement from $5.302 billion to $6.044 billion, to ensure that Valley Water has adequate funding to advance the reimbursement.



The chart above shows the distribution by type of improvement, of the $6.044 billion total CIP funding as planned in the FY 2021-25 CIP.

The chart above shows how the $6.044 billion to implement the 67 projects is allocated to each of the five types of improvements.

Of the $6.044 billion in total funding for the 67 projects identified in the CIP, the Board has appropriated $1.624 billion in prior years (through June 30, 2020, the end of Fiscal Year 2019-20). This year's CIP process identified additional funding needs of $4.421 billion to complete the projects in the CIP, with $204 million allocated in Fiscal Year 2020-21 and a total of $4.217 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.



The chart above shows how the $6.044 billion is distributed by fiscal year.

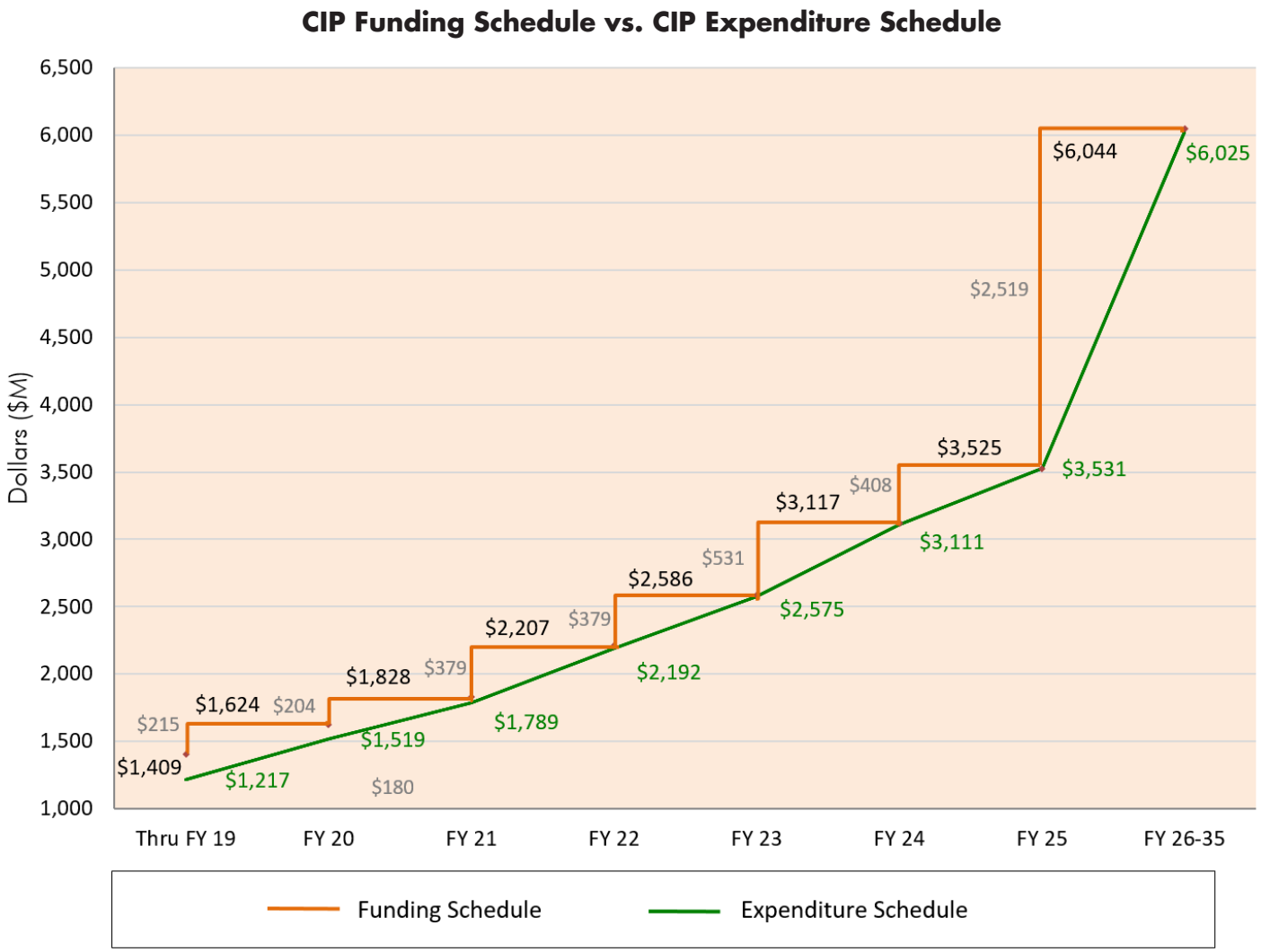
CIP Funding Schedule by Type of Improvement and Funding Sources ($K)

	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
WATER SUPPLY										
Water Utility Enterprise Fund	495,396	120,611	29,388	117,445	202,358	213,097	385,523	334,273	2,172,205	4,040,908
Safe, Clean Water and Natural Flood Protection Fund	18,326	733	671	633	1,902	27	2,522	2,592	2,773	29,508
Water Supply Total	513,722	121,344	30,059	118,078	204,260	213,124	388,045	336,865	2,174,978	4,070,416
FLOOD PROTECTION										
Watershed Stream Stewardship Fund	381,441	54,130	16,548	28,119	51,710	38,916	95,552	43,565	186,326	879,759
Safe, Clean Water and Natural Flood Protection Fund	450,109	30,046	44,347	48,702	84,967	96,833	26,223	3,953	74,850	815,683
Flood Protection Total	831,550	84,176	60,895	76,821	136,677	135,749	121,775	47,518	261,176	1,695,442
WATER RESOURCES STEWARDSHIP										
Water Utility Enterprise Fund	5,597	21	2,699	170	7,883	5,018	2,475	11,710	30,316	63,190
Watershed Stream Stewardship Fund	28,826	1,893	1,382	2,412	17,212	13,672	4,117	3,716	20,500	92,348
Safe, Clean Water and Natural Flood Protection Fund	5,828	1,646	3,389	-	7,228	2,180	218	1,897	1,953	20,950
Mitigation Total	40,251	3,560	7,470	2,582	32,323	20,870	6,810	17,323	52,769	176,488
BUILDINGS AND GROUNDS										
General Fund	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478
Buildings and Grounds Total	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478
INFORMATION TECHNOLOGY										
Water Utility Enterprise Fund	2,723	1,162	877	156	204	1,475	2,985	854	3,747	13,306
Information Technology Fund	20,975	1,973	4,307	3,334	793	2,453	1,388	459	8,581	39,956
Information Technology Total	23,698	3,135	5,184	3,490	997	3,928	4,373	1,313	12,328	53,262
TOTAL	1,409,241	214,278	103,608	203,987	379,445	378,870	530,787	408,572	2,518,906	6,044,086
CUMULATIVE TOTAL	1,409,241	1,623,519		1,827,506	2,206,951	2,585,821	3,116,608	3,525,180	6,044,086	

FY 2019-20 Funds to be reappropriated

Overview

As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately $104 million of the already appropriated $1.624 billion is not spent and is reappropriated to FY 2020-21 for continued use in those same projects in amounts consistent with the project expenditure schedule for FY 2020-21. The following chart explains the relationship between the CIP funding schedule and expenditure schedule.



This page intentionally left blank.

Water Supply

Water Supply Capital Improvements

WATER SUPPLY OVERVIEW

Valley Water manages and operates a complex and integrated water supply infrastructure, including storage, transmission, treatment, and recycled water facilities, to meet the Board's Ends Policy E–2, "There is a reliable, clean water supply for current and future generations."

Storage Facilities

- 10 surface reservoirs
- 393 acres of recharge ponds
- 76 miles of in-stream recharge
- Ground water basins

Transmission Facilities

- 142 miles of pipelines
- 3 pump stations

Treatment Facilities

- 3 treatment plants

Recycled Water Facilities

- Silicon Valley Advanced Water Purification Center
- South County Recycled Water Distribution System

Planning, design and construction of the above facilities took decades of effort. Beginning in the 1930s, reservoirs and recharge ponds were built to halt depletion of the ground water basin and subsidence, followed by pipelines and treatment plants to bring in state and federal water to meet growing water demands in the County.

In the early 1990s, Valley Water embarked on new and challenging capital improvements to upgrade its three drinking water treatment plants in order to meet new Environmental Protection Agency rules for improved water quality required by 1996 amendments to the Safe Drinking Water Act. Fifteen years of effort and capital funding brought the upgrades at Penitencia and Santa Teresa Water Treatment Plants to completion. Delivery of ozonated water produced at these two treatment plants began in 2006.

The Rinconada Water Treatment Plant (RWTP) was built in the late 1960s and is reaching the end of its useful life. A number of projects to upgrade and improve operations have been completed. The RWTP Reliability Improvement Project will add raw water ozonation, construct new flocculation and plate settler clarification, and dual media filtration facilities. It will also increase plant capacity from 80 to 100 million gallons per day. Construction of this Project began in the summer of 2015, and is a multi-year effort that will be constructed in a phased approach to allow the plant to continue operations throughout the construction process.

With a significant portion of the Water Supply infrastructure approaching 50 to 60 years of age, maintaining and upgrading the existing infrastructure to ensure each facility functions as intended for its useful life became the focus of the Water Supply CIP in recent years.

Valley Water owns and operates ten dams. While these dams provide water supply, flood management, recreation, and environmental flow benefits, there are consequences and costs for dam ownership. Knowledge of seismic stability design and construction was very rudimentary during the design and construction of Valley Water dams in the 1930s and 50s. Both liquefaction of dam embankments and foundations and embankment stability must be addressed for seismic stability. Several of Valley Water's reservoirs have had operating restrictions imposed by the Department of Safety of Dams (DSOD) while an engineering analysis of how Valley Water's dams would perform under a major seismic event is completed and appropriate corrective actions are implemented.

On November 26, 2010, the Board was informed that Anderson Dam will require a seismic retrofit and the operating restriction was increased to 45 feet below the crest of the dam. Since this briefing, a consultant has determined that a magnitude 7.2 Maximum Credible Earthquake on nearby Calaveras Fault could cause a deformation (slumping) of the dam crest by 25 feet. The Anderson Dam Seismic Retrofit Project ($576 million) was initiated in January 2011.

Water Supply Capital Improvements

Valley Water completed a seismic stability evaluation of Almaden, Calero, and Guadalupe Dams in late 2010. Almaden Dam was found to be seismically stable; however both Calero and Guadalupe Dams will require seismic retrofitting to meet DSOD performance criteria. A project was initiated in fiscal year 2013 to address the Calero and Guadalupe Dams retrofit needs. A separate capital project to address outlet and spillway improvements at Almaden Dam is continuing. Seismic stability evaluations were conducted at Lenihan and Stevens Creek Dams. Both were found to be seismically stable.

In April 2017, the Governor of California ordered detailed evaluations of large spillway structures at all high-hazard dams. Spillway evaluations are required on 9 of Valley Water's 10 dams. The spillway evaluation for 7 dams have been incorporated into existing projects and a separate contract for the spillway evaluation of the Lenihan and Stevens Creek dams will be formed.

Valley Water is partnering with Pacheco Pass Water District and San Benito County Water District for the Pacheco Reservoir Expansion Project. This Project will encompass the acquisition and expansion of this reservoir from 6,000 AF to 140,000 AF and will provide water quality benefits, operational flexibility, emergency storage, flood protection, and ecosystem benefits. On July 24, 2018, the California Water Commission awarded $484.55 million to support the project, including an early funding award of $24.2 million.

Major Capital Improvements Identified in the CIP:

Storage:

- Almaden Dam Improvements
- Anderson Dam Seismic Retrofit
- Calero Dam Seismic Retrofit
- Guadalupe Dam Seismic Retrofit
- Pacheco Reservoir Expansion

Transmission:

- 10-Year Pipeline Rehabilitation
- FAHCE Implementation
- Main and Madrone Pipeline Rehabilitation
- Vasona Pumping Plant Upgrade
- Almaden Valley Pipeline Replacement

Treatment:

- PWTP Residuals Management
- RWTP Reliability Improvement
- STWTP Filter Media Replacement
- Water Treatment Plant Electrical Improvement

Recycled Water:

- Expedited Purified Water Program
- South County Recycled Water Pipeline

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

Based on the feedback from the FY 2006-07 CIP and Board direction, a concerted effort was made to develop a multi-year water charge structure that would support the priority work of the water utility business. Staff analyzed both immediate requirements and anticipated future needs to support operations and the continued appropriations for capital investment needed to maintain infrastructure and comply with water quality regulations. Each year staff reviews Board priorities, the financial needs of the Water Utility Enterprise Fund, current political and economic factors and updates the multi-year structure. The rate structure for the first year is recommended to the Board for adoption during the annual rate setting process.

While Valley Water has one Water Utility fund, Valley Water has multiple zones of benefit for the purposes of setting groundwater production charges. The North County Zone is very different from the South County Zone in that the water infrastructure is substantially

separate and distinct with an entirely different cost of providing service. For example the north zone overlays the Santa Clara groundwater subbasin and is much more densely populated, requiring a large amount of imported water from outside the county to provide a reliable water supply. To receive, filter and distribute the imported water, Valley Water chose to build three water treatment plants and a network of raw water and treated water distribution pipelines many decades ago. Conversely, the South County overlays the Coyote Valley (southern Santa Clara subbasin) and the Llagas groundwater subbasins and is more sparsely populated.

South County communities rely almost entirely on groundwater, with small amounts of raw surface water and recycled water. A small amount of recycled water is served in the Gilroy area. No treated water is served in South County, so water utility infrastructure primarily supports the storage and distribution of local and imported surface water for groundwater recharge.

In June 2014 Valley Water commissioned a scientific study of its groundwater benefit zones. Based on a comprehensive evaluation of geological studies, local groundwater data, and the services Valley Water provides, staff proposed partitioning the South County zone into three zones to better reflect services and benefits received by well users. These adjustments ensure that ratepayers are grouped in a way that reflects the most recent and relevant data regarding the services and benefits received by well users.

On October 8, 2019 the Board directed staff to pursue modifying the existing groundwater benefit zones W-2 and W-5, and to create two new zones W-7 (Coyote Valley) and W-8 (below Uvas and Chesbro Reservoirs).

On April 28, 2020, the Board adopted resolutions modifying the boundaries of the existing groundwater benefit zones W-2 and W-5 and establishing new boundaries for groundwater benefit zones W-7 and W-8 that will go into effect July 1, 2020.

The financial analysis of the Water Utility Enterprise Fund, the funding source for the water supply capital improvements, is conducted in conjunction with the groundwater production charge process. After reviewing a number of scenarios staff proposed changes in the municipal and industrial (M&I) groundwater production charges with increases of up to 8.6% in North County Zone W-2 and 9.4% in South County Zone W-7, and a reduction of no more than 2.9% for the modified South County Zone W-5 and 32% for the new South County Zone W-8 in FY 2020-21. In light of the economic crisis spurred on by the COVID-19 Pandemic, Valley Water's Board of Directors directed staff to implement a 0% increase to the existing rates for North County Zone W-2 and South County Zone W-7. Staff

will return at mid-year with updates regarding the local economic situation to determine if a rate adjustment is feasible at that time.

Through the CIP Planning Process, two validated projects were added to the FY 2021-25 Draft CIP: Land Rights – South County Recycled Water Pipeline Project and the Almaden Valley Pipeline Replacement Project.

The majority of capital projects included in the 5-Year CIP are related to asset management, which replaces aging equipment and facilities, infrastructure reliability, which protects the county's baseline water supply, or Advanced Purified Water, which produces a drought-resilient source of water.

Valley Water is currently engaged in several critical studies related to understanding the conditions of various water supply facilities and meeting future water supply needs of the county. This effort included updating the Water Supply Master Plan (WSMP), which was approved by the Board on November 20, 2019.

The WSMP's sustainability strategy emphasized the need to secure existing supplies and infrastructure. To that end, the Board approved three new projects for inclusion in the FY 2021-25 Draft CIP. These projects are:

- Supervisory Control and Data Acquisition (SCADA) Implementation Project;
- Water Treatment Plant Implementation Project; and
- Distribution System Implementation Project.

This page intentionally left blank.

Water Supply Capital Improvements

The following table is a project funding schedule for water supply capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2019-20.

Water Supply Capital Improvements

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
	STORAGE FACILITY										
91854001	Almaden Dam Improvements	14,604	154	-	168	110	116	122	130	52,043	67,447
91864005	Anderson Dam Seismic Retrofit (C1)	50,061	12,879	760	10,109	2,757	58,596	53,433	53,919	334,491	576,245
91084020s	Calero and Guadalupe Dams Seismic Retrofits	30,818	1,197	671	2,809	15,472	25,287	24,962	6,392	153,735	260,672
91234002	Coyote Pumping Plant ASD Replacement	1,234	1,027	324	2,431	5,932	4,136	648	83	-	15,491
91234011	Coyote Warehouse	6,878	2,482	21	284	77	69	-	-	-	9,790
91084019	Dam Seismic Stability Evaluation	21,605	631	-	426	5,513	463	486	447	879	30,450
91954002	Pacheco Reservoir Expansion Project	17,260	35,106	6,214	27,784	42,068	35,875	243,308	232,878	711,070	1,345,349
91214010s	Small Capital Improvements, San Felipe Reach 1-3	n/a	7,432	-	3,126	2,419	109	163	2,390	28,505	44,144
	TRANSMISSION FACILITY										
95084002	10-Year Pipeline Rehabilitation (FY18-FY27)	37,854	17,385	1,544	17,223	11,337	8,317	5,410	5,105	8,939	111,570
92304001	Almaden Valley Pipeline Replacement Project	-	-	-	668	873	1,328	2,625	2,025	82,158	89,677
95044001	Distribution Systems Implementation Project	-	-	-	2,000	3,419	2,828	-	-	-	8,247
92C40357	FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
26764001	IRP2 Additional Line Valves (A3)	1,090	399	671	633	1,902	27	2,522	2,592	2,773	11,938
26564001	Main & Madrone Pipelines Restoration (A1)	17,236	334	-	-	-	-	-	-	-	17,570
92144001	Pacheco/Santa Clara Conduit Right of Way Acquisition	2,827	-	547	503	1,756	323	-	-	-	5,409
95044002	SCADA Implementation Project	-	-	-	1,365	2,518	2,892	-	-	-	6,775
92764009	Small Capital Improvements, Raw Water Transmission	n/a	1,215	-	82	68	19	407	2,089	4,719	8,599
94764006	Small Capital Improvements, Treated Water Transmission	n/a	178	-	-	37	42	32	128	259	676
94084007	Treated Water Isolation Valves	529	742	1,245	-	-	-	1,994	283	5,597	9,145
92264001	Vasona Pump Station Upgrade	1,380	525	-	1,217	20,116	463	85	-	-	23,786
94084008	Westside Retailer Interties	147	-	69	-	360	1,376	117	-	-	2,000
	TREATMENT FACILITY										
93234044	PWTP Residuals Management	-	-	-	683	1,433	7,627	-	-	-	9,743
93294051s	RWTP Residuals Remediation	43,573	2,632	7,304	10,316	3,919	3,648	675	-	-	64,763
93294057	RWTP Reliability Improvement	197,597	22,766	-	30,848	43,363	28,649	17,987	128	-	341,338
93294056	RWTP Treated Water Valves Upgrade	8,603	21	148	-	5	-	-	-	-	8,629
93764004	Small Capital Improvements, Water Treatment	n/a	11,353	-	3,035	3,863	1,269	5,732	3,392	27,229	55,873
93284013	STWTP Filter Media Replacement Project	-	203	-	444	2,934	5,081	1,793	-	-	10,455
93084004	Water Treatment Plant Electrical Improvement Project	-	203	-	447	3,423	5,860	2,056	-	-	11,989
93044001	WTP Implementation Project	-	-	-	1,024	3,505	4,052	-	-	-	8,581
	RECYCLED WATER FACILITY										
91304001s	Expedited Purified Water Program (EPWP)	23,869	2,480	2,639	-	1,265	1,736	8,797	10,194	655,972	704,313
91094001	Land Rights - South County Recycled Water PL	-	-	-	204	3,882	3,564	-	-	-	7,650
91094007s	South County Recycled Water Pipeline	36,557	-	7,902	249	15,195	4,993	-	-	-	56,994
	TOTAL	513,722	121,344	30,059	118,078	204,260	213,124	388,045	336,865	2,174,978	4,070,416

FY 2019-20 Funds to be reappropriated

Water Supply Capital Improvements

The following table shows funding requirements from each funding source for water supply capital.

Water Supply - Funding Source ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
61	Water Utility Enterprise Fund	495,396	120,611	29,388	117,445	202,358	213,097	385,523	334,273	2,172,205	4,040,908
26	Safe, Clean Water and Natural Flood Protection Fund	18,326	733	671	633	1,902	27	2,522	2,592	2,773	29,508
	TOTAL	513,722	121,344	30,059	118,078	204,260	213,124	388,045	336,865	2,174,978	4,070,416

FY 2019-20 Funds to be reappropriated

This page intentionally left blank.

Storage Facilities

Storage Facilities

- 10 Surface Reservoirs
- 393 Acres of Recharge Ponds
- 76 Miles of In-stream Recharge
- 8 Capital Projects
- Groundwater Basins

Project	**Almaden Dam Improvements**
Program	Water Supply – Storage
Project No.	91854001
Contact	Christopher Hakes chakes@valleywater.org

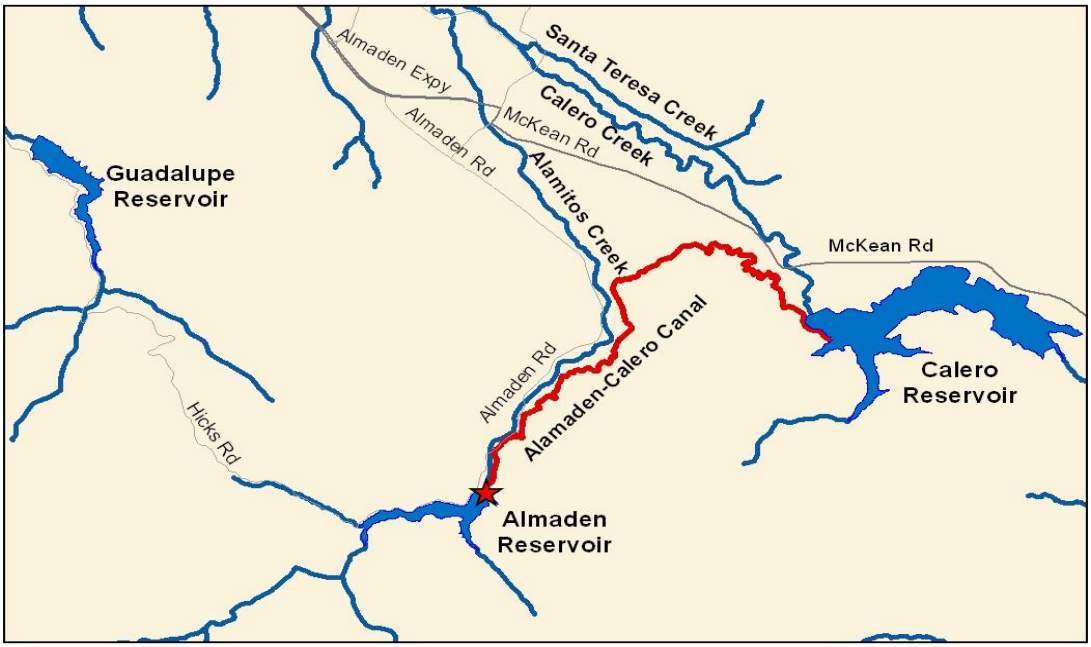
Aerial view of Almaden Dam and spillway, and part of the reservoir

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Almaden Dam outlet works to accomplish the following objectives:

- Modify or construct a new intake structure, capable of releasing 246 cubic feet-per-second of water without flushing of sediments through the outlet works.
- Correct existing problems with the outlet energy dissipation structure, piping and valves.
- Restore operational capacity to the Almaden-Calero Canal and stabilize and improve maintenance access.

PROJECT LOCATION

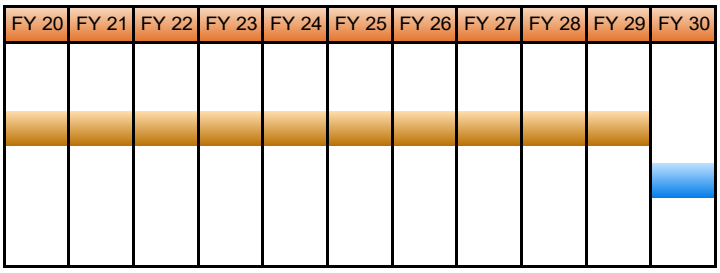


Project Location

SCHEDULE & STATUS

July 1995 to June 2031

Phase	Cost
Plan	5,099
Design	5,108
Construct	37,633
Closeout	4
	53,608



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91854001-Almaden Dam Improvements	13,964	794	168	100	100	100	102	38,280	53,608
with inflation	13,964	794	168	110	116	122	130	52,043	67,446

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91854001-Almaden Dam Improvements	14,604	154	0	168	110	116	122	130	52,043	67,446

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	67,446
Other Funding Source	0
Total	**67,446**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $2,000 per year, beginning in FY31. Manually flushing the control valves during the winter months to remove silt will no longer be required.

USEFUL LIFE: 50+ Years

Project	**Anderson Dam Seismic Retrofit**
Program	Water Supply – Storage
Project No.	91864005
Contact	Christopher Hakes chakes@valleywater.org

Aerial view of Anderson Dam, spillway, and part of the reservoir

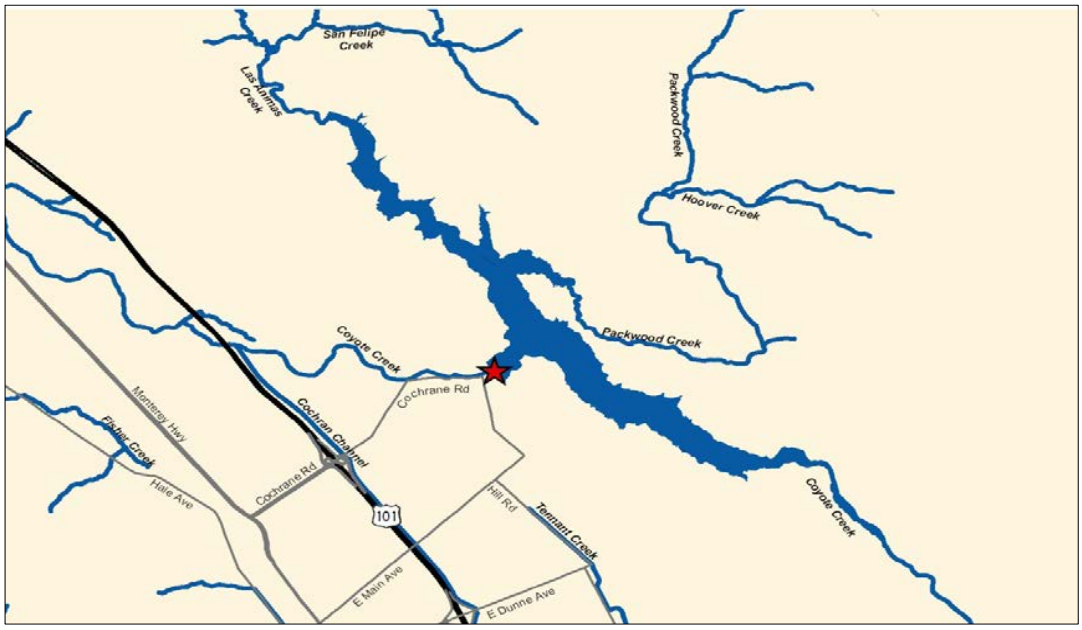
PROJECT DESCRIPTION

This project plans, designs, and constructs seismic retrofit or replacement of outlet works at Anderson Dam, pending completion of a field investigation that will determine whether the Coyote Fault is seismically active. Seismic stability improvements will accomplish the following objectives:

- Resolve seismic stability deficiencies to ensure public safety.
- Restore lost reservoir storage capacity resulting from the operational restriction issued by Division of Safety of Dams (DSOD).
- Resolve the DSOD/FERC (Federal Energy Regulatory Commission) requirements in a timely manner.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project C1. For a full description of the SCW benefits and KPI's, please visit www.valleywater.org.

PROJECT LOCATION

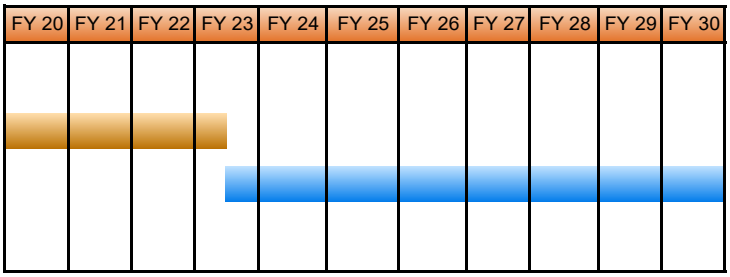


★ Project Location

SCHEDULE & STATUS

January 2011 to December 2033

Phase	Cost
Plan	21,381
Design	49,006
Construct	434,360
Closeout	1,100
	513,510



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91864005-Anderson Dam Seismic Retrofit	49,677	12,503	10,869	2,501	52,860	48,000	48,000	289,100	513,510
with inflation	49,677	12,503	10,869	2,757	58,596	53,433	53,919	334,492	576,247

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91864005-Anderson Dam Seismic Retrofit	50,061	12,879	760	10,109	2,757	58,596	53,433	53,919	334,492	576,247

Adjusted Budget includes adopted budget plus any planned budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	510,194
SCVWD Safe Clean Water Fund	66,053
Other Funding Sources	0
Total	**576,247**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project Calero and Guadalupe Dams Seismic Retrofits
Program Water Supply - Storage
Project No. 91084020 & 91894002 **Contact** Christopher Hakes chakes@valleywater.org

Aerial view of the Calero Dam and reservoir

Areial view of the Guadalupe Dam, spillway, and part of the reservoir

PROJECT DESCRIPTION

Project 91084020: This project performs planning (engineering and environmental) for the Calero and Guadalupe Dams.
Project 91894002: This project designs and constructs improvements to Guadalupe Dam.
The projects will accomplish the following objectives:

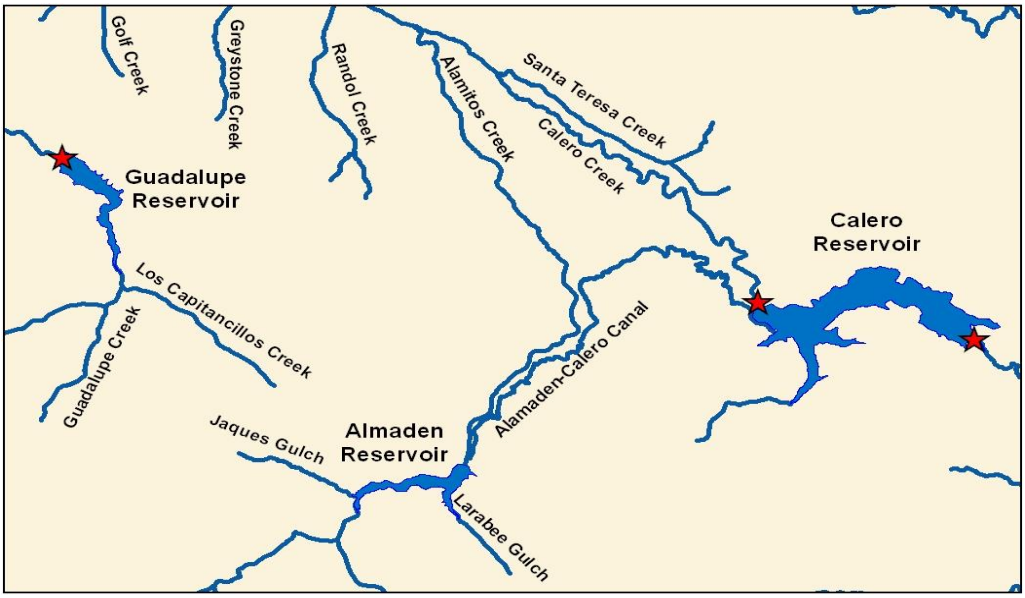
Calero Dam

- Stabilize the embankment to withstand a Maximum Credible Earthquake (MCE).
- Modify or replace the outlet works if determined to be inadequate.
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood (PMF).
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage.
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike.

Guadalupe Dam

- Stabilize the embankment to withstand a MCE.
- Implement improvements as necessary for the dam system to safely pass the PMF.
- Ensure that the outlet works and hydraulic control system meet the Division of Safety of Dams requirements.
- Relocate the intake structure out of the upstream berm in a timely manner.
- Incorporate other measures to address seismic and other dam safety deficiencies that are identified through the Project delivery process.

PROJECT LOCATION

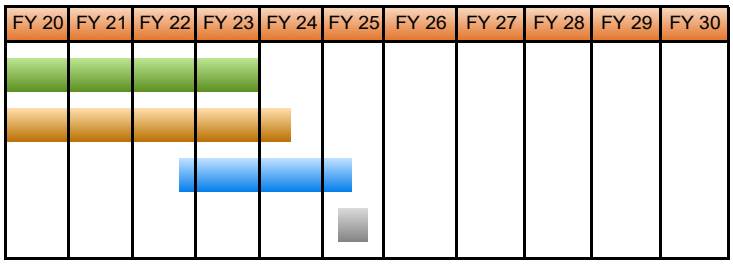


★ Project Location

SCHEDULE & STATUS

July 2012 to January 2025

Phase	Cost
Plan	10,945
Design	8,652
Construct	63,250
Closeout	72
	87,469



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	8,937	340	1,565	1,990	340	0	0	0	13,172
with inflation	8,937	340	1,565	2,194	394	0	0	0	13,430
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	9,195	789	816	11,600	23,075	23,000	5,822	0	74,297
with inflation	9,195	789	816	12,373	24,777	24,865	6,354	0	79,169
TOTAL	**18,132**	**1,129**	**2,381**	**13,590**	**23,415**	**23,000**	**5,822**	**0**	**87,469**
with inflation	**18,132**	**1,129**	**2,381**	**14,567**	**25,171**	**24,865**	**6,354**	**0**	**92,599**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91084020 - Calero and Guadalupe Dams Seismic Retrofits-Planning	9,476	0	199	1,366	2,194	394	0	0	0	13,430
91894002 - Guadalupe Dam Seismic Retrofit-Design & Construct	9,468	789	273	543	12,373	24,777	24,865	6,354	0	79,169
TOTAL	**18,944**	**789**	**472**	**1,909**	**14,567**	**25,171**	**24,865**	**6,354**	**0**	**92,599**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	92,599
Other Funding Source	0
Total	**92,599**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: 50+ Years

Project	**Calero Dam Seismic Retrofit-Design & Construction**
Program	Water Supply – Storage
Project No.	91874004
Contact	Christopher Hakes chakes@valleywater.org

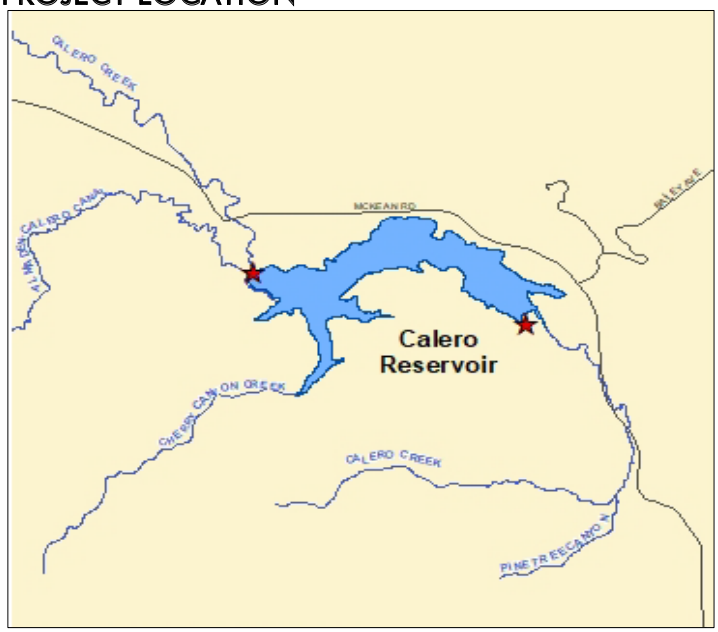
Aerial view of the Calero Dam and reservoir

PROJECT DESCRIPTION

This project designs and constructs improvements to the Calero Dam to accomplish the following objectives:

- Stabilize the embankment to withstand a Maximum Credible Earthquake.
- Modify or replace the outlet works if determined to be inadequate.
- Modify the spillway or increase the freeboard of the dam for safe passage of the Probable Maximum Flood.
- Provide modifications that do not preclude potential future expansion of dam and reservoir to provide additional reservoir storage.
- Remove or relocate the Bailey Ranch structures and breach Fellow's Dike.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

January 2015 to June 2035

Phase	Cost
Plan	8
Design	13,189
Construct	103,502
Closeout	8
	118,571

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91874004 - Calero Dam Seismic Retrofit-Design & Construct	11,483	600	1,099	821	100	80	30	104,358	118,571
with inflation	11,483	600	1,099	905	116	97	38	153,734	168,073

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91874004 - Calero Dam Seismic Retrofit-Design & Construct	11,874	408	199	900	905	116	97	38	153,734	168,073

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	168,073
Other Funding Source	0
Total	**168,073**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: 50+ Years

Project	**Coyote Pumping Plant ASD Replacement**
Program	Water Supply – Storage
Project No.	91234002
Contact	Heath McMahon hmcmahon@valleywater.org

ASD motors at the Coyote Pumping Plant

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Coyote Pumping Plant Adjustable Speed Drives (ASD) to accomplish the following objectives:

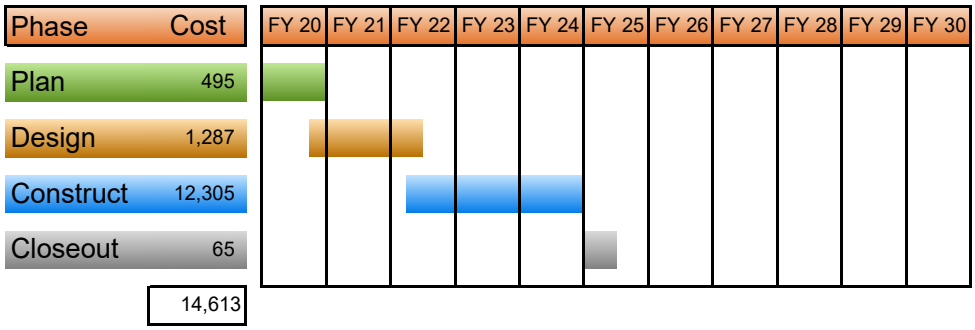
- Replace existing outdated and unsupported ASDs with the latest technology.
- Modify/convert existing six wound rotor motors to be compatible with new stator fed ASD.
- Upgrade the heating, ventilation and air conditioning system to support the additional cooling requirements.
- Modify/upgrade supervisory control and data acquisition control and instrumentation systems, and control strategy to support the new ASDs.
- Replace two main medium voltage circuit breakers and one medium voltage tie circuit breaker (switch) which are at the end of service life.
- Replace motor control equipment line-up with new switchgears.
- Installation of a pump motor vibration and a power monitoring system and motor control center.

PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2017 to December 2024



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91234002-Coyote Pumping Plant ASD Replacement	911	1,027	2,440	5,865	3,735	570	65	0	14,613
with inflation	911	1,027	2,440	6,279	4,136	648	83	0	15,524

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91234002-Coyote Pumping Plant ASD Replacement	1,235	1,027	324	2,116	6,279	4,136	648	83	0	15,524

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	15,524
Other Funding Sources	0
Total	**15,524**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $60,000 per year beginning in FY24.

USEFUL LIFE: Not Available

Project	**Coyote Warehouse**
Program	Water Supply - Storage
Project No.	91234011
Contact	Heath McMahon hmcmahon@valleywater.org

Storage containers currently used to secure equipment and spare parts

PROJECT DESCRIPTION

This project plans, designs, and constructs the Coyote Warehouse to accomplish the following objectives:

- Provide suitable storage space for pipeline spare parts and appurtenances, and to protect such materials from weather.
- Improve Valley Water's staff efficiency and effectiveness in pipeline maintance work.

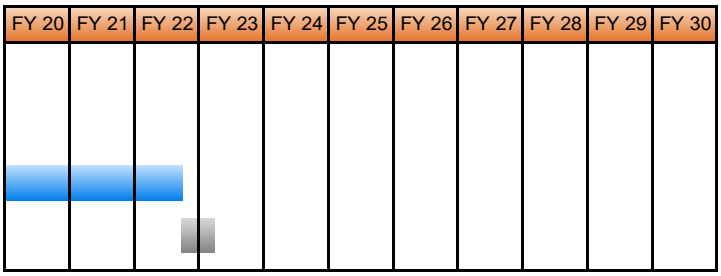
PROJECT LOCATION

★ Project Locati

SCHEDULE & STATUS

July 2015 to September 2022

Phase	Cost
Plan	156
Design	883
Construct	4,047
Closeout	60
	9,774



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91234011-Coyote Warehouse	5,976	3,363	305	70	60	0	0	0	9,774
with inflation	5,976	3,363	305	77	69	0	0	0	9,791

Actuals include prroject expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91234011-Coyote Warehouse	6,878	2,482	21	284	77	69	0	0	0	9,791

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	9,791
Other Funding Sources	0
Total	**9,791**

OPERATING COST IMPACTS

Operating cost impacts will be determined upon completion of the construction phase.

USEFUL LIFE: 50 years

Project	**Dam Seismic Stability Evaluations**
Program	Water Supply – Storage
Project No.	91084019
Contact	Christopher Hakes chakes@valleywater.org

Field exploration for seismic stability evaluations

PROJECT DESCRIPTION

This project conducts preliminary planning (seismic stability evaluation) for nine dams to accomplish the following objectives:

- Address seismic stability issues.
- Provide for public safety.
- Ensure operational availability of reservoirs.
- Address protection of the assets.

This project funds preliminary planning activities to determine the need for seismic stability improvements for eight of the nine dams identified on the map below. The evaluations for Almaden, Calero, Guadalupe, Lenihan, and Stevens Creek Dams have been completed as part of this project, while the evaluations for Coyote, Chesbro and Uvas are scheduled to continue through 2026. (The seismic stability evaluation for Anderson Dam was completed in a separate project.) Planning, design, and construction of identified seismic improvements, will be funded in the future as site-specific projects.

PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

August 2009 to December 2026

Phase	Cost
Plan	29,463
Design	-
Construct	-
Closeout	-
	29,463

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91084019-Dam Seismic Stability Evaluations	21,507	729	427	5,000	400	400	350	650	29,463
with inflation	21,507	729	427	5,513	463	486	447	879	30,450

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91084019-Dam Seismic Stability Evaluations	21,606	631	1	426	5,513	463	486	447	879	30,450

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	30,450
Other Funding Source	0
Total	**30,450**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50+ Years

Project	**Pacheco Reservoir Expansion Project**
Program	Water Supply – Storage
Project No.	91954002
Contact	Christopher Hakes chakes@valleywater.org

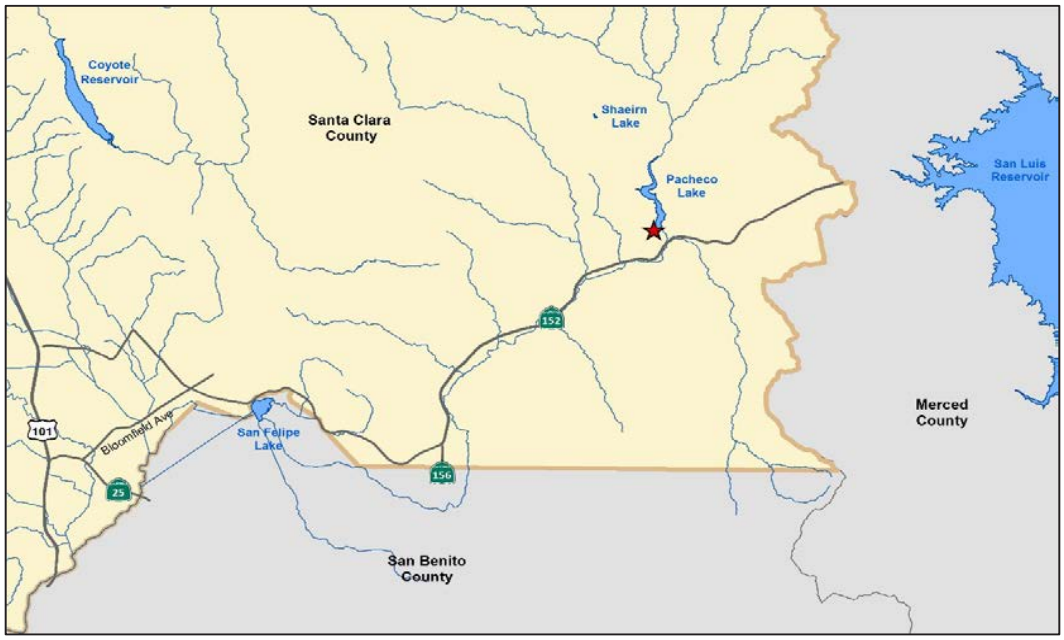
View of Pacheco Reservoir from the dam

PROJECT DESCRIPTION

This project will include expanding the storage capacity of the existing Pacheco Reservoir to 140,000 acre-feet through construction and operation of a new dam, conveyance facilities, and related appurtenant structures. The project objectives include:

- Increase suitable habitat in Pacheco Creek for federally threatened steelhead.
- Increase water supply reliability to help meet municipal and industrial water demands in Santa Clara County during drought periods and emergencies, or to address shortages due to regulatory and environmental restrictions.
- Develop water supplies for environmental water management that support habitat management and other environmental water needs.
- Avoid supply interruptions when water is needed by increasing the certainty of meeting the requested delivery schedule throughout the year to south-of-Delta contractors dependent on San Luis Reservoir.
- Reduce flood risks along Pacheco Creek and downstream areas.

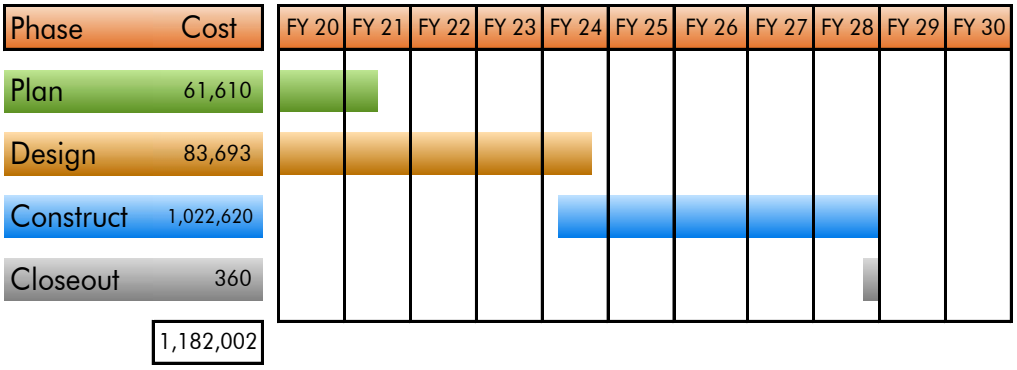
PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

October 2018 to June 2028



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
91954002-Pacheco Reservoir Expansion Project	16,964	29,188	33,998	38,157	30,990	213,569	203,844	615,293	1,182,002
with inflation	16,964	29,188	33,998	42,068	35,875	243,308	232,878	711,070	1,345,349

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
91954002-Pacheco Reservoir Expansion Project	17,260	35,106	6,214	27,784	42,068	35,875	243,308	232,878	711,070	1,345,349

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	438,639
California Water Commission	484,550
Other Funding Sources "Unsecured" (WIIN and WIFIA)	250,000
Partnership Contributions	172,160
Total	1,345,349

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the design phase.

USEFUL LIFE: TBD

Project	**Small Capital Improvements, San Felipe**
Program	Water Supply – Storage
Project No.	91214010s
Contact	Aaron Baker abaker@valleywater.org

Example of bacterial corrosion on a suction wear ring of an impeller

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project implements a systematic approach to the renewal and replacement of equipment at facilities within the San Felipe Division, by designing and constructing improvements identified through Valley Water's 10-year asset management program. Infrastructure within this project includes tunnels, large diameter pipelines, valve structures, pumps, and associated support equipment. Reach 1 renewal and replacement activities are conducted in coordination and cooperation with San Felipe Division Reach 1 contractors and other agencies. Planned projects for FY21 include:

- 91214010 Reach 1: Refurbish or rebuild pump 1 motor windings and bearings; replacement of pump 10 discharge guard valve; installation of a fire suppression system; various electrical upgrades.
  Other identified work: Pacheco Tunnel Reach 2 entrance door hydraulic valve operating system replacement; domestic water pump system replacement; western area power administration sub-station surge arresters - 6 kilovolt and 72 kilovolt; chilled water pump-1 and chilled water pump-2 standard rebuild and rehabilitation; mechanical & heating, ventilation and air conditioning gallery upgrades; chiller 1 and 2 repair and rehabilitation; adjustable speed drives gallery, Telephone/Modem/T-1 replacement.
- 91224010 Reach 2: Calaveras Fault Inlet/Calaveras Fault Outlet road access fix (culvert replacements).
- 91234010 Reach 3: Replace existing end-of-life staff trailers. Purchase and install mezzanine and shelving in new warehouse. Coyote Discharge Line – Replace meter vault instrumentation, overhaul and recoat 2 pumps at Coyote Pumping Plant.
- All active projects have positive net present value savings at the time of the feasibility study and are subject to design phase validation.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program. Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	34,140

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	5,716	2,061	1,293	94	89	1,864	16,844	27,961
with inflation	n/a	5,716	2,061	1,426	109	108	2,379	25,110	36,909
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	867	859	0	0	0	0	10	1,736
with inflation	n/a	867	859	0	0	0	0	12	1,738
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	850	206	901	0	45	9	2,432	4,443
with inflation	n/a	850	206	993	0	55	11	3,383	5,499
TOTAL	**0**	**7,433**	**3,126**	**2,194**	**94**	**134**	**1,873**	**19,286**	**34,140**
with inflation	**0**	**7,433**	**3,126**	**2,419**	**109**	**163**	**2,390**	**28,506**	**44,146**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91214010-Small Capital Improvements, San Felipe Reach 1	n/a	5,716	0	2,061	1,426	109	108	2,379	25,110	36,909
91224010-Small Capital Improvements, San Felipe Reach 2	n/a	866	0	859	0	0	0	0	12	1,737
91234010-Small Capital Improvements, San Felipe Reach 3	n/a	850	0	206	993	0	55	11	3,383	5,499
TOTAL	**0**	**7,432**	**0**	**3,126**	**2,419**	**109**	**163**	**2,390**	**28,506**	**44,145**

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	38,779
San Benito County Water District	5,366
Total	**44,145**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Transmission Facilities

Project	**10-Year Pipeline Inspection & Rehabilitation**
Program	Water Supply – Transmission
Project No.	95084002
Contact	Heath McMahon hmcmahon@valleywater.org

A typical rehabilitated line valve assembly

PROJECT DESCRIPTION

The project develops Valley Water's large diameter Pipeline Management Strategy and a 10-year program for implementation tasks associated with the strategy. This program involves the inspection, planning, and design activities required for renewal of Valley Water's large pipelines and tunnels. The project includes the following objectives:

- Perform dewatering and internal inspections of Valley Water's pipelines and tunnels.
- Renew distressed pipe sections as required. Renewal encompasses the actions of repair, rehabilitation, and replacement.
- Perform condition assessment, maintenance, repair, coating, and other activities as required.
- Replace line valves, flow meters, pipeline appurtenance assemblies, and piping as required.
- Improve system performance by installing cathodic protection systems, acoustic fiber optic monitoring of prestressed concrete cylinder pipe, and transient pressure monitoring systems.
- Development of a pipeline asset risk management system that includes geographic information system, databases, algorithms, models, data acquisition, program documents, and decision support systems.

The project schedule includes inspection and renewal work along the various pipelines and tunnels as identified below:

- 2019: Cross Valley Pipeline and Calero Pipeline
- 2020: Central Pipeline, Parallel East Pipeline
- 2021: Santa Clara Conduit, Pacheco Tunnel Reach 2, Santa Clara Tunnel
- 2022: West Pipeline, Penitencia Delivery Main, Penitencia Force Main
- 2023: Almaden Valley Pipeline, Santa Teresa Force Main, Stevens Creek Pipeline

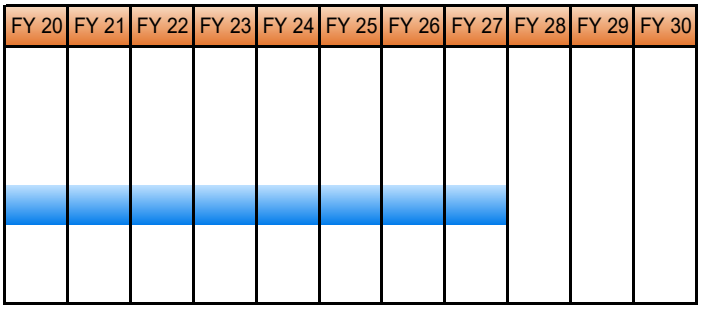
PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2017 to June 2027

Phase	Cost
Plan	2,897
Design	14,902
Construct	80,231
Closeout	372
	105,680



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95084002-10-Year Pipeline Inspection & Rehabilitation	28,561	25,134	18,767	10,624	7,523	4,451	4,000	6,620	105,680
with inflation	28,561	25,134	18,767	11,337	8,317	5,410	5,105	8,939	111,570

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95084002-10-Year Pipeline Inspection & Rehabilitation	37,854	17,385	1,544	17,223	11,337	8,317	5,410	5,105	8,939	111,570

Adjusted Budget includes adopted budget plus any planned budget adjustment.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	111,570
Other Funding Sources	0
Total	**111,570**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 50 Years

Project	**Almaden Valley Pipeline Replacement**
Program	Water Supply - Transmission
Project No.	92304001
Contact	Heath McMahon hmcmahon@valleywater.org

Almaden Valley Pipeline Replacement work is underway

PROJECT DESCRIPTION

The Almaden Valley Pipeline (AVP) is a part of the Valley Water raw water delivery system. This pipeline is used to supply raw water to Valley Water's water treatment plants and groundwater recharge facilities. This pipeline provides access, with no redundancy, to local raw water sources from Valley Water's Anderson and Calero Reservoirs and imported water from the United States Bureau of Reclamation San Luis Reservoir and San Felipe system. The AVP was constructed in two major units/phases: Unit 1 was constructed in the 1960s and Unit 2 was constructed in the 1980s. The AVP is approximately 12 miles in length consisting of 72-inch up to 78-inch diameter prestressed concrete cylinder pipe (approximately 7.5 miles), welded steel pipe and bar wrapped pipe (approximately 4.2 miles).

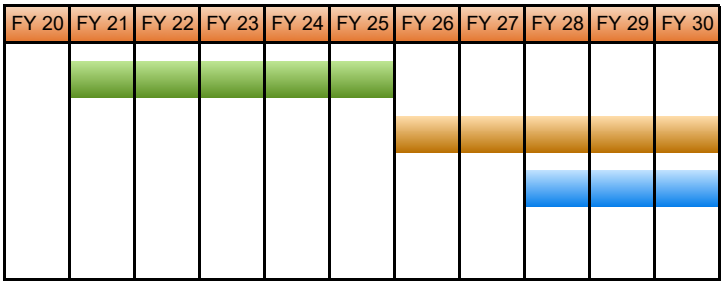
PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2019 to June 2040

Phase	Cost
Plan	8,366
Design	10,127
Construct	43,769
Closeout	-
	62,262



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92304001-Almaden Valley Pipeline Replacement	0	0	668	792	1,147	2,160	1,587	55,908	62,262
with inflation	0	0	668	873	1,328	2,625	2,025	82,157	89,677

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92304001-Almaden Valley Pipeline Replacement	0	0	0	668	873	1,328	2,625	2,025	82,157	89,677

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

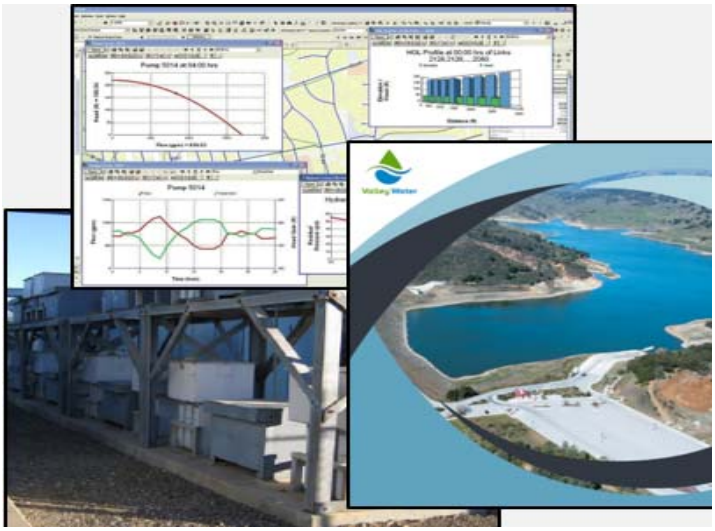
SCVWD Water Utility Enterprise Fund	89,677
Other Funding Sources	0
Total	**89,677**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the design phase.

USEFUL LIFE: TBD

Project	**Distribution System Implementation Plan**
Program	Water Supply - Transmission
Project No.	95044001
Contact	Garth Hall ghall@valleywater.org

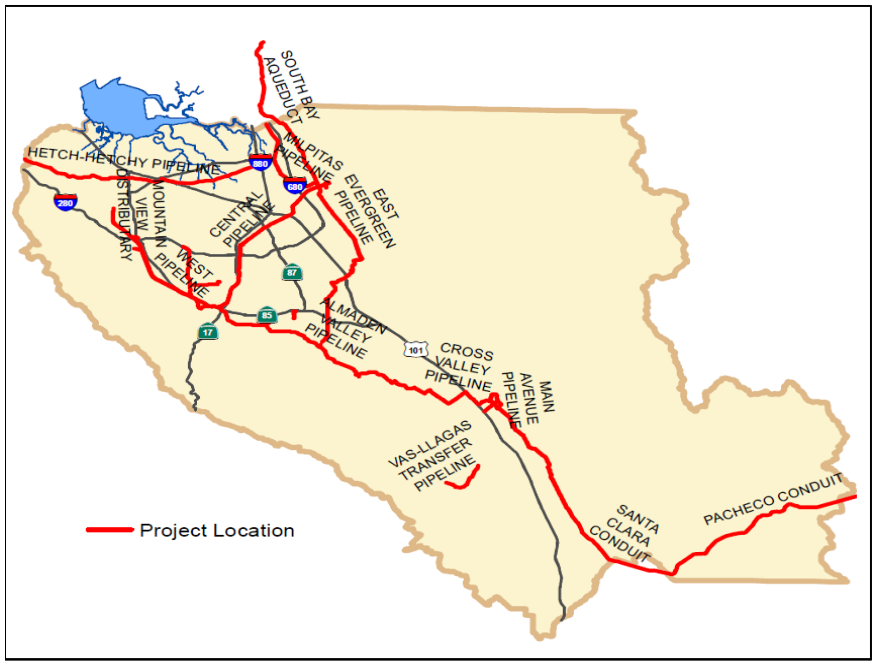


Distribution System Implementation Plan

PROJECT DESCRIPTION

This project will develop and implement a Distribution Systems Master Plan, which will yield recommendations for capital actions needed to protect existing raw and treated water distribution systems. New projects and programs identified by the plan will help to ensure a future of safe and clean water delivery for Santa Clara County.

PROJECT LOCATION



Project Location

SCHEDULE & STATUS

July 2020 to June 2023

Phase	Cost
Plan	7,179
Design	365
Construct	-
Closeout	-
	7,544

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95044001-Distribution System Implementation Plan	0	0	2,000	3,101	2,443	0	0	0	7,544
with inflation	0	0	2,000	3,419	2,828	0	0	0	8,247

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95044001-Distribution System Implementation Plan	0	0	0	2,000	3,419	2,828	0	0	0	8,247

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,247
Other Funding Sources	0
Total	**8,247**

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning and design effort. Projects and programs identified through the implementation plan will have their own operating cost impacts identified as they come online.

USEFUL LIFE: TBD

Project	**FAHCE Implementation**
Program	Water Supply - Transmission
Project No.	92C40357
Contact	Vincent Gin vgin@valleywater.org

Fish habitats, such as the one shown here, will be developed for habitat conservation

PROJECT DESCRIPTION

In 1996, Guadalupe-Coyote Resource Conservation District (GCRCD) filed a water rights complaint with the State Water Resources Control Board (SWRCB) alleging Valley Water's exercise of its appropriative water rights in Coyote Creek, Guadalupe River and Stevens Creek and their tributaries (Three Creeks) was not providing adequate flows for the protection of fisheries and other aquatic resources. A negotiation process now known as Fish and Aquatic Habitat Collaborative Effort (FAHCE) ensued and resulted in the initialing of the FAHCE Settlement Agreement in 2003 by GCRCD, U.S. Fish and Wildlife, National Marine Fisheries Service, California Department of Fish and Wildlife, and other parties. The FAHCE Settlement Agreement includes a proposed FAHCE program that was reviewed by staff of the state and federal resource management agencies, and will again receive regulatory review as it undergoes environmental impact review prior to implementation to ensure compliance with all applicable laws. The FAHCE program focuses on habitat improvements for steelhead and chinook salmon and is intended to comprehensively address and resolve all issues in the water rights complaint and any related issues arising under state and federal laws that concern the impacts of Valley Water's facilities and operation on the beneficial uses of the Three Creeks. Once environmental impact review of the FAHCE program is completed, it will be submitted to the SWRCB and included in Valley Water's Three Creek appropriative water rights. The FAHCE program consists of reservoir reoperations to support salmonid spawning, rearing and migration; fish passage remediation and aquatic habitat restoration measures, and an adaptive management program.

PROJECT LOCATION

Project sites will be located at reservoirs and streams within the Three Creeks Project Area, in the Guadalupe, Coyote and Stevens Creek Watersheds. Project site locations are yet to be determined and no map is provided.

SCHEDULE & STATUS

July 2020 to June 2026

Phase	Cost
Plan	145,108
Design	-
Construct	-
Closeout	-
	145,108

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92C40357-FAHCE Implementation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108
with inflation	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92C40357-FAHCE Implementation	0	0	0	0	4,739	4,379	14,691	14,690	106,609	145,108

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	145,108
Other Funding Source	0
Total	**145,108**

OPERATING COST IMPACTS

Operating cost impacts will be dependent on the maintenance requirements of each site. Once the sites have been identified, operating costs will be determined based on the existing conditions and maintenance identified for each site.

USEFUL LIFE: Not Available

Project	**IRP2 Additional Line Valves**
Program	Water Supply – Transmission
Project No.	26764001
Contact	Heath McMahon hmcmahon@valleywater.org

New line valves, actuators, and vaults similar to this will be installed along the East, West, and Snell pipelines

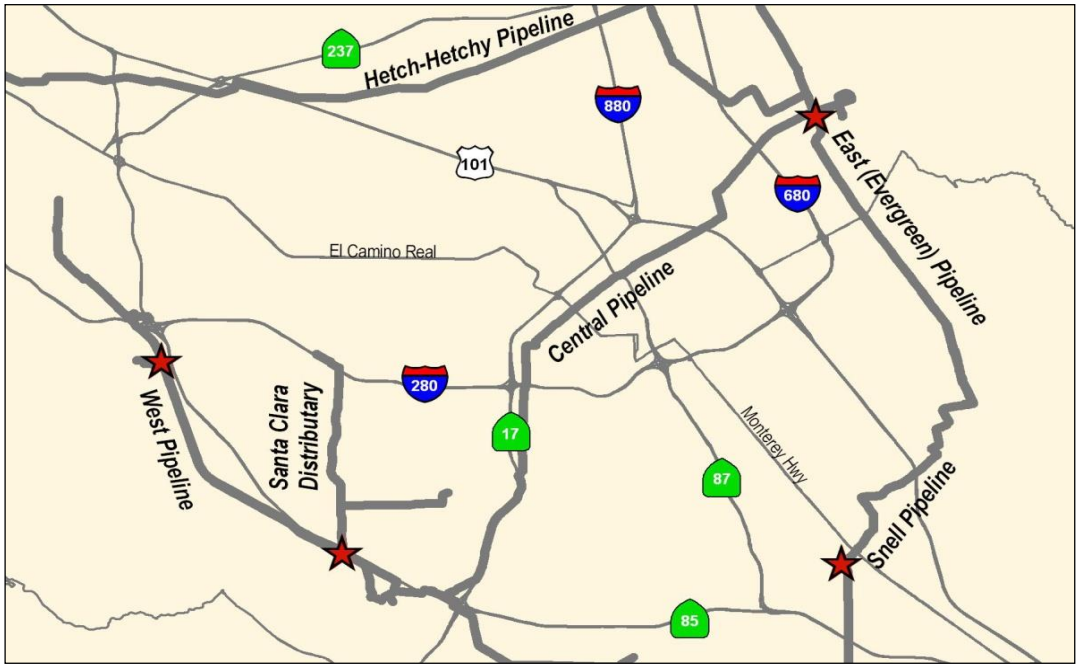
PROJECT DESCRIPTION

This project plans, designs, and constructs four additional line valves in the treated water distribution system, as defined in the Water Infrastructure Reliability Plan, Phase 2 (IRP2). Design and construction of this project will be in conjunction with work on the same pipelines under the 10- year Pipeline Inspection and Rehabilitation Project. The new line valves will be at various locations along the East, West, and Snell pipeline to accomplish the following objectives:

- Allow Valley Water to isolate sections of the treated water pipeline for general maintenance or to repair activities following a major seismic event.
- Allow the network of emergency wells to operate, even when there is damage upstream and downstream of individual wells.

This project meets the commitments of the Safe, Clean Water Program (SCW), Project A3. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION



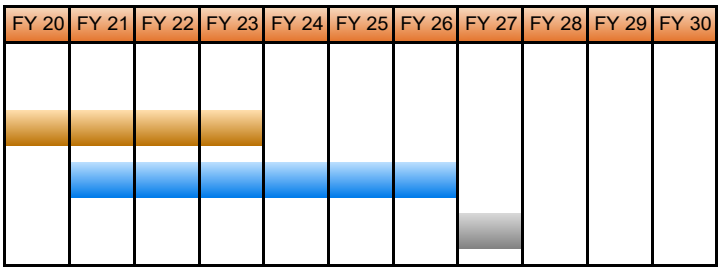
★ Project Location

SCHEDULE & STATUS

July 2018 to June 2027

Line valve construction to be coordinated with pipeline maintenance and rehabilitation projects.

Phase	Cost
Plan	308
Design	1,443
Construct	8,728
Closeout	70
	10,551



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26764001-IRP2 Additional Line Valves	279	539	1,304	1,773	25	2,197	2,182	2,252	10,551
with inflation	279	539	1,304	1,902	27	2,522	2,592	2,773	11,939

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26764001-IRP2 Additional Line Valves	1,090	399	671	633	1,902	27	2,522	2,592	2,773	11,939

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe Clean Water Fund	11,939
Other Funding Source	0
Total	**11,939**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 35 Years

Project Main & Madrone Pipelines Restoration
Program Water Supply - Transmission
Project No. 26564001 **Contact** Aaron Baker abaker@valleywater.org

Main Avenue Ponds facing North

Madrone Pipeline Outlet into Madrone Channel looking North along Northbound Interstate 101

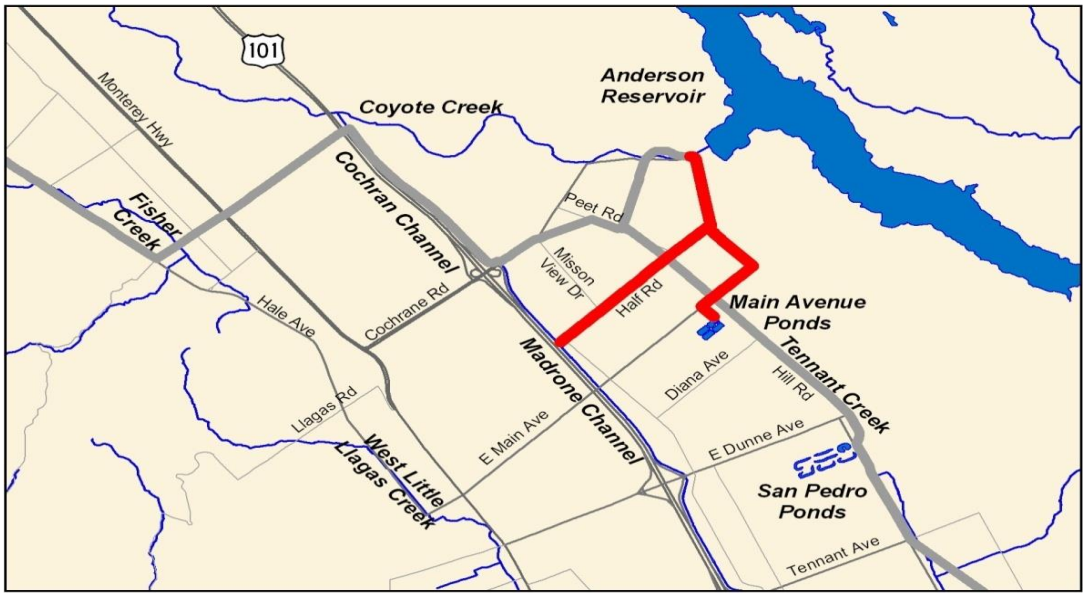
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on the full length of the Madrone Pipeline and rehabilitates the Main Avenue Pipeline to accomplish the following objectives:

- Provide the means to utilize another reliable water source, (e.g. Anderson Reservoir) to supply water to the Main Avenue Ponds and the Madrone Channel.
- Allow for greater flows to the Main Avenue Ponds and the Madrone Channel.
- Maximize imported water flows to the treatment plants.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project A1. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

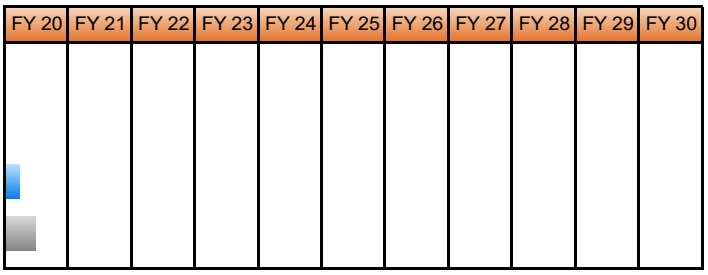


Project Location

SCHEDULE & STATUS

July 2014 to December 2019

Phase	Cost
Plan	345
Design	3,088
Construct	12,725
Closeout	90
	17,570



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26564001-Main & Madrone Pipelines Restoration	17,306	264	0	0	0	0	0	0	17,570
with inflation	17,306	264	0	0	0	0	0	0	17,570

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26564001-Main & Madrone Pipelines Restoration	17,236	334	0	0	0	0	0	0	0	17,570

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	6,354
SCVWD Water Utility Enterprise Fund	11,216
Total	**17,570**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as it does not significantly alter the facility or modes of operation.

USEFUL LIFE: 40 Years

Project	**Pacheco/Santa Clara Conduit Right of Way Acquisition**
Program	Water Supply – Transmission
Project No.	92144001
Contact	Heath McMahon hmcmahon@valleywater.org

Access to much of the San Felipe Division pipelines must currently be made through private property, due to a lack of easements, such as Bloomfield access at Vault 21-23

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements related to the acquisition of right-of-way along the South County pipelines to accomplish the following objectives:

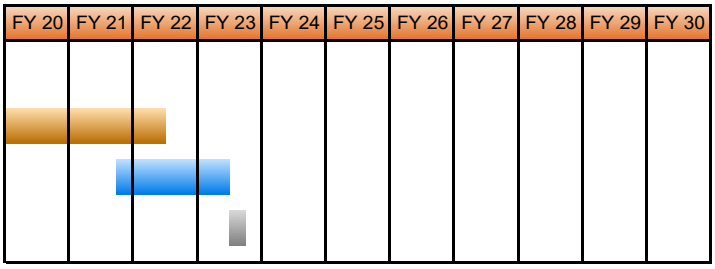
- Provide unlimited access to Valley Water-owned pipelines.
- Reduce conflicts with local land owners and improve response time for emergency repairs or operations.

PROJECT LOCATION

SCHEDULE & STATUS

July 2009 to March 2023

Phase	Cost
Plan	1,739
Design	2,348
Construct	984
Closeout	35
	5,207



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	1,680	600	1,050	1,596	281	0	0	0	5,207
with inflation	1,680	600	1,050	1,756	323	0	0	0	5,409

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92144001-Pacheco/Santa Clara Conduit Right of Way Acquisition	2,827	0	547	503	1,756	323	0	0	0	5,409

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	5,382
San Benito County Water District	27
Total	**5,409**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $8,000 per year, beginning in FY22, for vegetation control and/or maintenance of fences, gates and locks for the access roads.

USEFUL LIFE: 15-20 Years

Project	**SCADA Implementation Project**
Program	Water Supply - Transmission
Project No.	95044002
Contact	Bhavani Yerrapotu byerrapotu@valleywater.org

Process control / SCADA system

PROJECT DESCRIPTION

The process control/supervisory control and data acquisition (SCADA) systems, which serve a pivotal role in monitoring and controlling Valley Water's raw water conveyance system (including reservoirs and pumping plants), treatment plants, and distribution systems, are aging and in need of a coordinated replacement and upgrade.

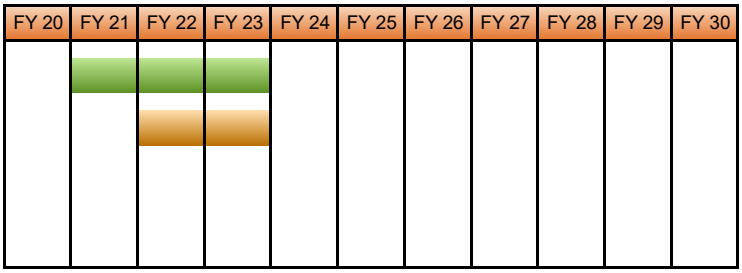
The proper functioning of these systems is essential for meeting water demand, maintaining water quality, achieving regulatory compliance, and satisfying customer expectations. In addition, the process control/SCADA systems provide important data used accross the organization in the Operations, Maintenance, Water Quality, and Management divisions. Improved access to the data provided by this project will allow for more efficient management and operation of all the complex facilities and systems involved.

PROJECT LOCATION

SCHEDULE & STATUS

July 2019 to June 2023

Phase	Cost
Plan	4,453
Design	1,694
Construct	-
Closeout	-
	6,147



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95044002-SCADA Implementation Project	0	0	1,365	2,284	2,498	0	0	0	6,147
with inflation	0	0	1,365	2,518	2,892	0	0	0	6,775

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95044002-SCADA Implementation Project	0	0	0	1,365	2,518	2,892	0	0	0	6,775

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	6,775
Other Funding Sources	0
Total	**6,775**

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning and design effort. Projects identified through this implementation project will have their own operating cost impacts identified as they come online.

USEFUL LIFE: TBD

Project	**Small Capital Improvements, Raw Water Transmission**
Program	Water Supply – Transmission
Project No.	92764009
Contact	Aaron Baker abaker@valleywater.org

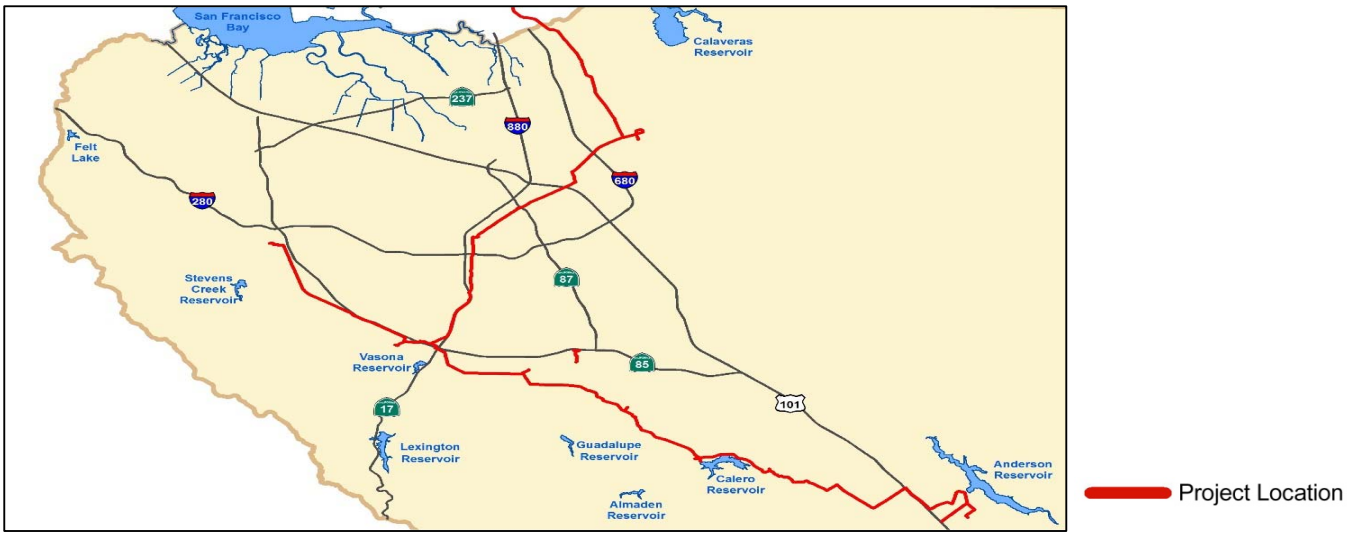
Major repair and replacement of turnout roofs and similar small raw water capital projects will be completed in accordance with the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing raw water distribution facilities. These activities include identifying and fixing corrosion problems, replacing valves and other appurtenances and modifying water recharge facilities to avoid failure of the raw water transmission system and extend the life of the infrastructure. This project is part of Valley Water's 10-year asset management program. Planned projects for FY21 include:

- Pay Valley Habitat Fees for long-term permitting.
- Fix turnout roofs.
- Purchase spare parts for inventory.
- Video inspection of South County recycled water pipeline.

PROJECT LOCATION



SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	1,215	82	62	16	335	1,637	3,096	6,443
with inflation	n/a	1,215	82	68	19	407	2,089	4,720	8,600

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92764009-Small Capital Improvements, Raw Water Transmission	n/a	1,215	0	82	68	19	407	2,089	4,720	8,600

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,600
Other Funding Source	0
Total	**8,600**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Small Capital Improvements, Treated Water Transmission**
Program	Water Supply – Transmission
Project No.	94764006
Contact	Aaron Baker abaker@valleywater.org

Valve installation in the Piedmont Line Valve Vault; Similar small capital projects will be carried out at treated water transmission facilities according to the asset management plan.

PROJECT DESCRIPTION

This project provides resources for the improvement of small capital investments that replace or extend the life of an asset. This project will repair or rehabilitate various existing treated water distribution facilities, such as identifying and treating corrosion problems, replacing valves and other appurtenances and repairing or adding turnouts to avoid failure of the treated water transmission system and to extend the life of the infrastructure. This project is part of Valley Water's 10-year asset management program. Planned projects for FY21 include:

- Treated water meter replacements.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	178	0	34	36	26	100	177	551
with inflation	n/a	178	0	37	42	32	128	259	675

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94764006-Small Capital Improvements, Treated Water Transmission	n/a	178	0	0	37	42	32	128	259	675

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	675
Other Funding Source	0
Total	**675**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Treated Water Isolation Valves**
Program	Water Supply – Transmission
Project No.	94084007
Contact	Heath McMahon hmcmahon@valleywater.org

New line valves similar to this will be installed at three locations within the treated water system.

PROJECT DESCRIPTION

This project plans, designs, and constructs three (3) additional line valve appurtenances to accomplish the following objectives:

- Improve service levels to treated water system customers in a major hazard event or system outage.
- Improve Valley Water's ability to take sections of the treated water distribution system out of service for maintenance activities.

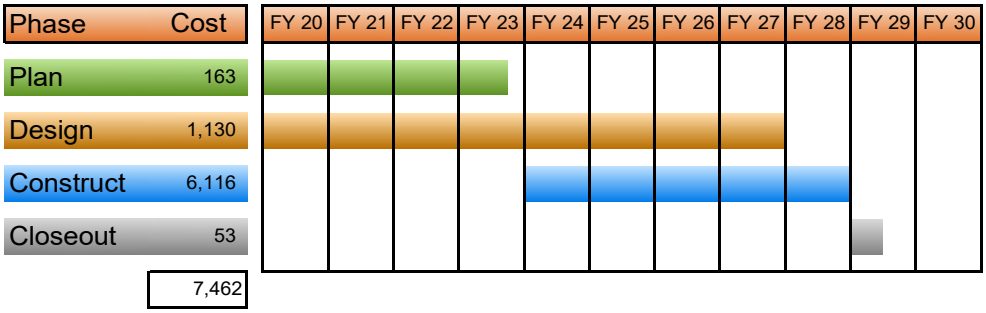
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

December 2018 to December 2028

Line valve construction to be coordinated with other pipeline maintenance and rehabilitation projects.



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94084007-Treated Water Isolation Valves	15	12	89	187	296	2,253	222	4,388	7,462
with inflation	15	12	89	206	343	2,600	283	5,597	9,146

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94084007-Treated Water Isolation Valves	529	743	1,245	0	0	0	1,993	283	5,597	9,146

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	9,146
Other Funding Sources	0
Total	**9,146**

OPERATING COST IMPACTS

The operating budget impact for the three proposed line valve facilities is estimated to be $21,000 per year beginning in FY28.

USEFUL LIFE: 50 Years

Project	**Vasona Pump Station Upgrade**
Program	Water Supply – Transmission
Project No.	92264001
Contact	Heath McMahon hmcmahon@valleywater.org

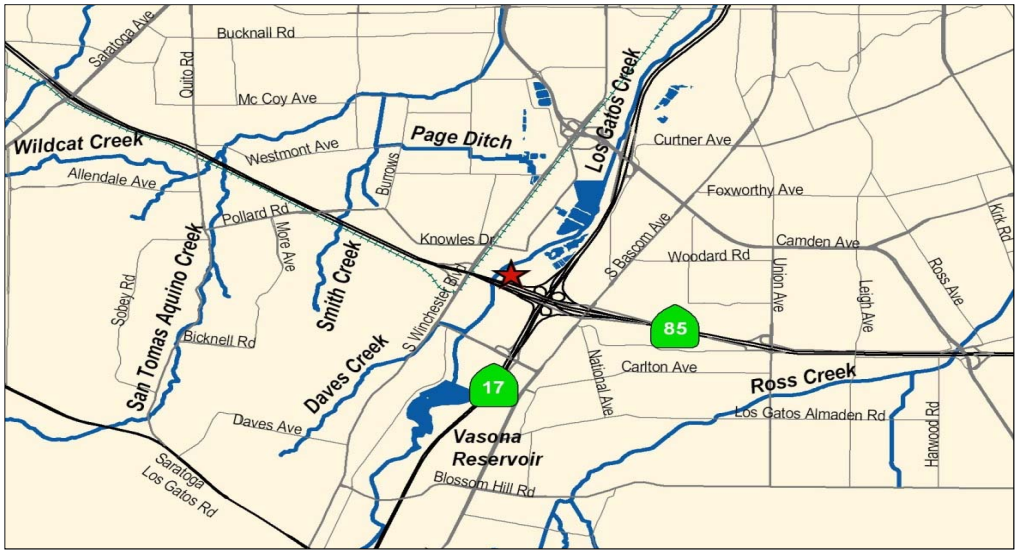
Vasona Pumping Plant pump

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the Vasona Pump Station, including replacing aging pumps, motors, drives, valves, actuators, and electrical and control systems that have reached the end of their useful life; and adding one redundant pump. The project will accomplish the following objectives:

- Eliminate the risk of failure by replacing assets that have reached the end of their useful life, including four pumps (two 200 horsepower, two 400 horsepower) and associated motors, drives, electrical and control systems, as well as pump discharge and suction valves and actuators.
- Increase operational flexibility and prepare for future capacity needs by adding one redundant pump and increasing the size of the two 200 horsepower pumps.

PROJECT LOCATION

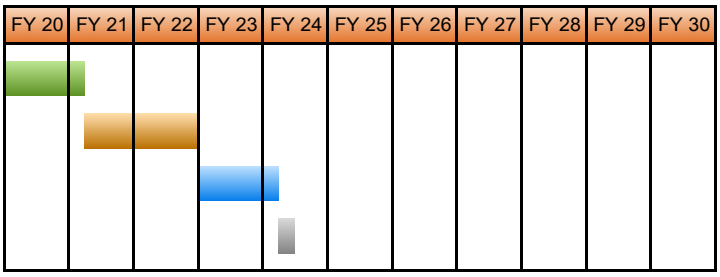


★ Project Location

SCHEDULE & STATUS

July 2017 to November 2023

Phase	Cost
Plan	1,315
Design	1,599
Construct	18,770
Closeout	70
	22,495



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92264001-Vasona Pump Station Upgrade	1,097	809	1,217	18,902	400	70	0	0	22,495
with inflation	1,097	809	1,217	20,116	463	85	0	0	23,788

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
92264001-Vasona Pump Station Upgrade	1,380	526	0	1,217	20,116	463	85	0	0	23,788

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	23,788
Other Funding Sources	0
Total	**23,788**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $70,000 per year beginning in FY23.

USEFUL LIFE: 50 Years

Project	**Westside Retailer Interties**
Program	Water Supply – Transmission
Project No.	94084008
Contact	Heath McMahon hmcmahon@valleywater.org

New interties similar to this will be installed in the cities of Santa Clara and Mountain View.

PROJECT DESCRIPTION

This project plans, designs, and constructs two new retailer interties and associated appurtenances, structures, and controls in the cities of Santa Clara and Mountain View. The project will accomplish the following objectives:

- Improve service levels to the West treated water system customers in a major hazard event or system outage.
- Improve Valley Water's ability to take sections of the West treated water distribution system out of service for maintenance activities.

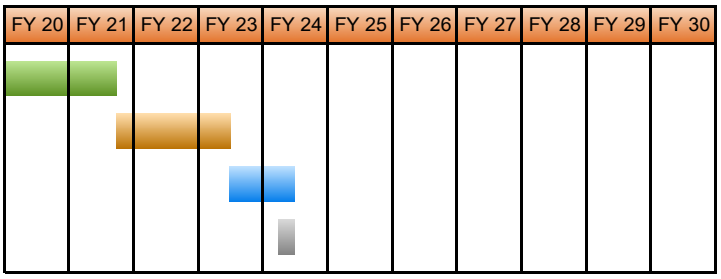
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

April 2018 to November 2023

Phase	Cost
Plan	138
Design	393
Construct	1,250
Closeout	24
	1,808



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94084008-Westside Retailer Interties	72	6	67	328	1,239	96	0	0	1,808
with inflation	72	6	67	362	1,376	117	0	0	1,999

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
94084008-Westside Retailer Interties	147	0	69	0	360	1,376	117	0	0	1,999

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	1,999
Other Funding Sources	0
Total	**1,999**

OPERATING COST IMPACTS

The operating budget impact for the two proposed Interties is estimated to be $11,000 per year beginning in FY24.

USEFUL LIFE: 50 Years

Treatment Facilities

Treatment Facilities

- 3 Treatment Plants
- 8 Capital Projects

Project PWTP Residuals Management
Program Water Supply - Treatment
Project No. 93234044 **Contact** Heath McMahon hmcmahon@valleywater.org

Existing settling pond and residuals building to be replaced with new residuals management facility

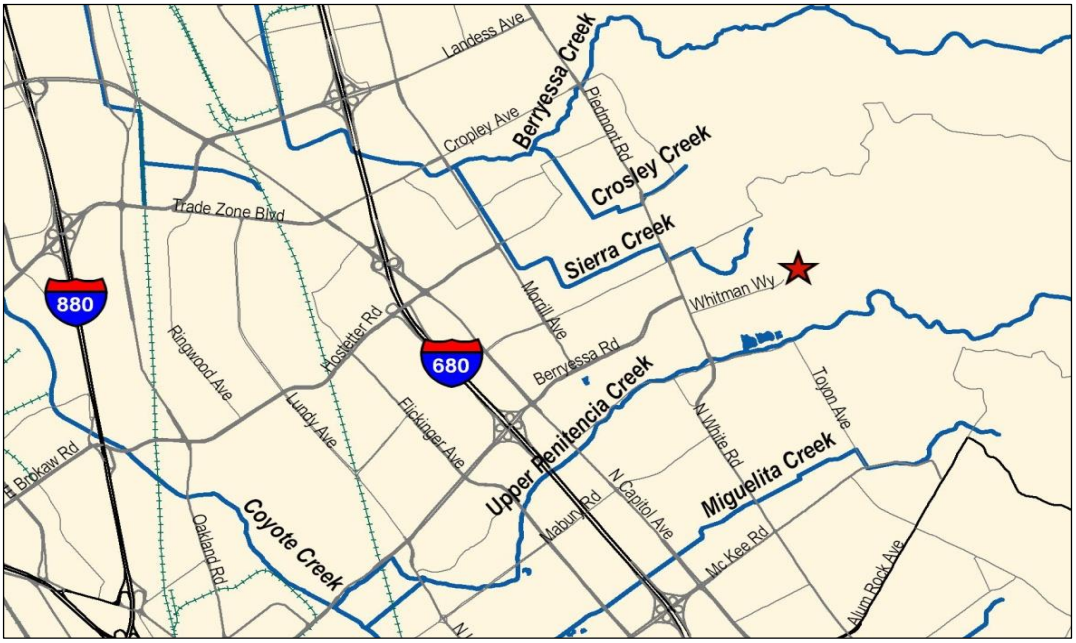
Existing belt press to be replaced with new residuals management facility

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Penitencia Water Treatment Plant (PWTP) residuals management process to accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize or eliminate (existing) operational constraints and impacts to the drinking water treatment process.
- Minimize risk of discharge violations.
- Improve the reliability of PWTP.

PROJECT LOCATION

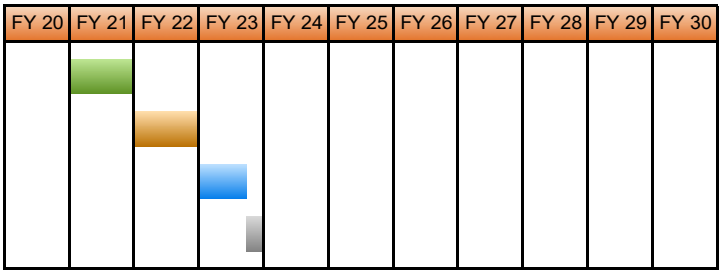


★ Project Location

SCHEDULE & STATUS

July 2020 to June 2023

Phase	Cost
Plan	683
Design	1,300
Construct	6,925
Closeout	-
	8,908



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93234044-PWTP Residuals Management	0	0	683	1,300	6,925	0	0	0	8,908
with inflation	0	0	683	1,433	7,627	0	0	0	9,743

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93234044-PWTP Residuals Management	0	0	0	683	1,433	7,627	0	0	0	9,743

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	9,743
Other Funding Sources	0
Total	**9,743**

OPERATING COST IMPACTS

Operating cost impacts will be determined during the construction phase.

USEFUL LIFE: Not Available

Project RWTP Residuals Remediation
Program Water Supply - Treatment
Project No. 93294051s **Contact** Heath McMahon hmcmahon@valleywater.org

Centrifuge for mechanical dewatering of sludge

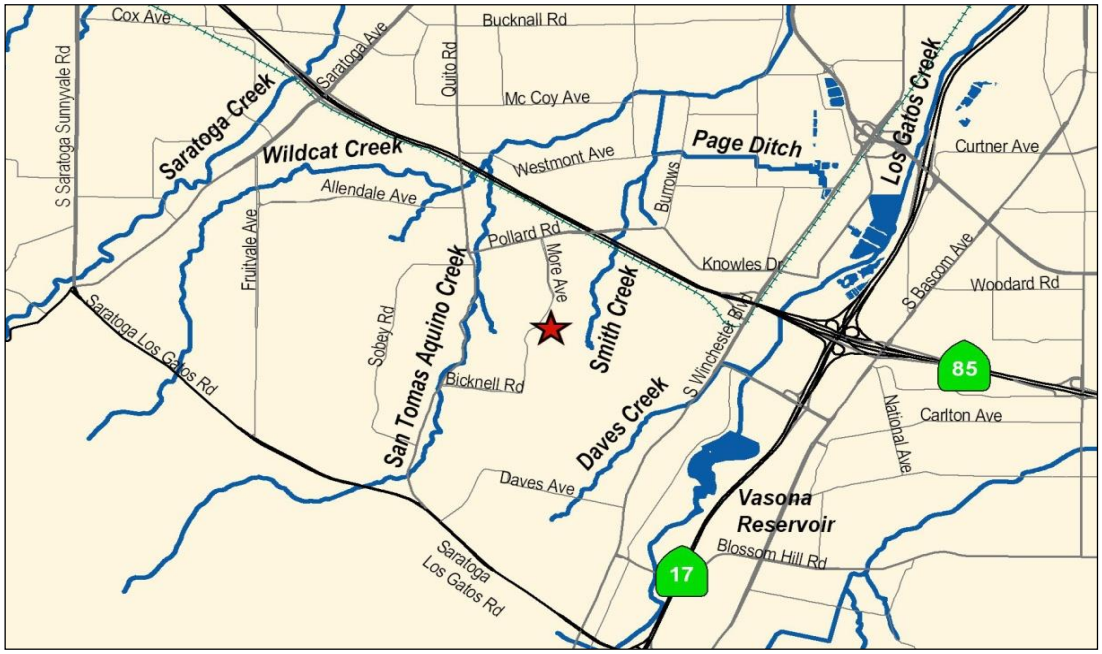
New gravity thickeners and mix tank for sludge thickening and blending

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP) residuals management processes and will accomplish the following objectives:

- Extend the useful life of the treatment plant.
- Improve the efficiency of the residual management processes.
- Minimize risk of discharge violations.
- Improve the reliability of RWTP.

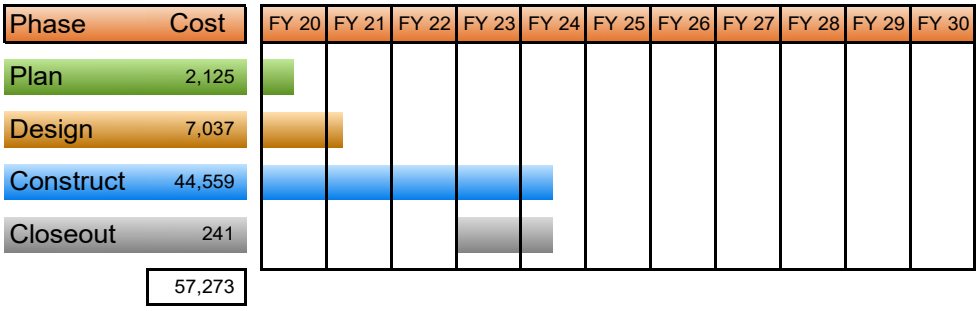
PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2008 to December 2023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294051-RWTP FRP Residuals Management	31,632	261	11	0	0	0	0	0	31,904
with inflation	31,632	261	11	0	0	0	0	0	31,904
93294058-RWTP Residuals Remediation	4,373	2,635	10,941	3,630	3,235	555	0	0	25,369
with inflation	4,373	2,635	10,941	3,919	3,648	675	0	0	26,190
TOTAL	**36,005**	**2,896**	**10,952**	**3,630**	**3,235**	**555**	**0**	**0**	**57,273**
with inflation	**36,005**	**2,896**	**10,952**	**3,919**	**3,648**	**675**	**0**	**0**	**58,094**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294051-RWTP FRP Residuals Management	38,573	0	6,680	0	0	0	0	0	0	38,573
93294058-RWTP Residuals Remediation	5,000	2,632	624	10,317	3,919	3,648	675	0	0	26,190
TOTAL	43,573	2,632	7,304	10,317	3,919	3,648	675	0	0	64,763

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $6,669,000. Excess funding will be returned to reserves upon project completion

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	64,763
Other Funding Source	0
Total	**64,763**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease annual operating costs by approximately $200,000 per year starting in FY24.

USEFUL LIFE: Structures–50 Years, Mechanical Equipment–15 Years, Electrical Equipment–10 Years

Project RWTP Reliability Improvement
Program Water Supply - Treatment
Project No. 93294057 **Contact** Heath McMahon hmcmahon@valleywater.org

Aerial view of the
Rinconada Water Treatment Plant facing west

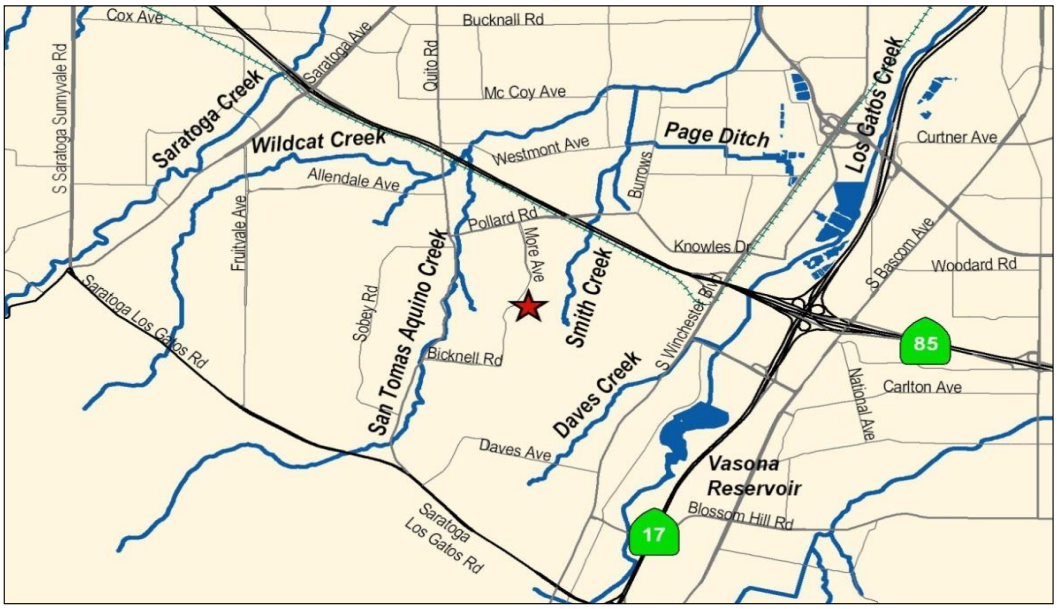
Artist rendering of the aerial view of the Rinconada
Water Treatment Plant facing south after construction

PROJECT DESCRIPTION

This project plans, designs, and constructs new facilities at Rinconada Water Treatment Plant (RWTP) that will improve plant reliability by accomplishing the following objectives:

- Construct a new raw water ozonation facility.
- Construct a new flocculation and plate settler clarification facility.
- Implement a dual media filtration system.
- Increase RWTP capacity to 100 million gallons per day.

PROJECT LOCATION

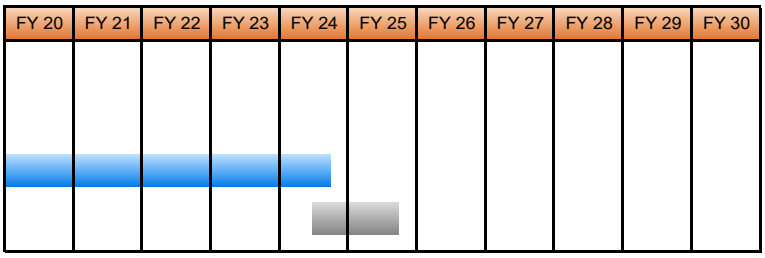


★ Project Location

SCHEDULE & STATUS

July 2009 to March 2025

Phase	Cost
Plan	1,934
Design	19,883
Construct	277,587
Closeout	120
	336,358



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294057-RWTP Reliability Improvement	187,196	33,167	30,848	41,549	27,073	16,425	100	0	336,358
with inflation	187,196	33,167	30,848	43,363	28,649	17,987	128	0	341,337

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294057-RWTP Reliability Improvement	197,597	22,766	0	30,848	43,363	28,649	17,987	128	0	341,337

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	341,337
Other Funding Source	0
Total	**341,337**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $1.4 million per year, beginning in FY24. Increases are for routine maintenance and operation of new equipment.

USEFUL LIFE: Media – 20 Years, Structures – 50 Years, Equipment – 15 Years

Project	**RWTP Treated Water Valves Upgrade**
Program	Water Supply – Treatment
Project No.	93294056
Contact	Heath McMahon hmcmahon@valleywater.org

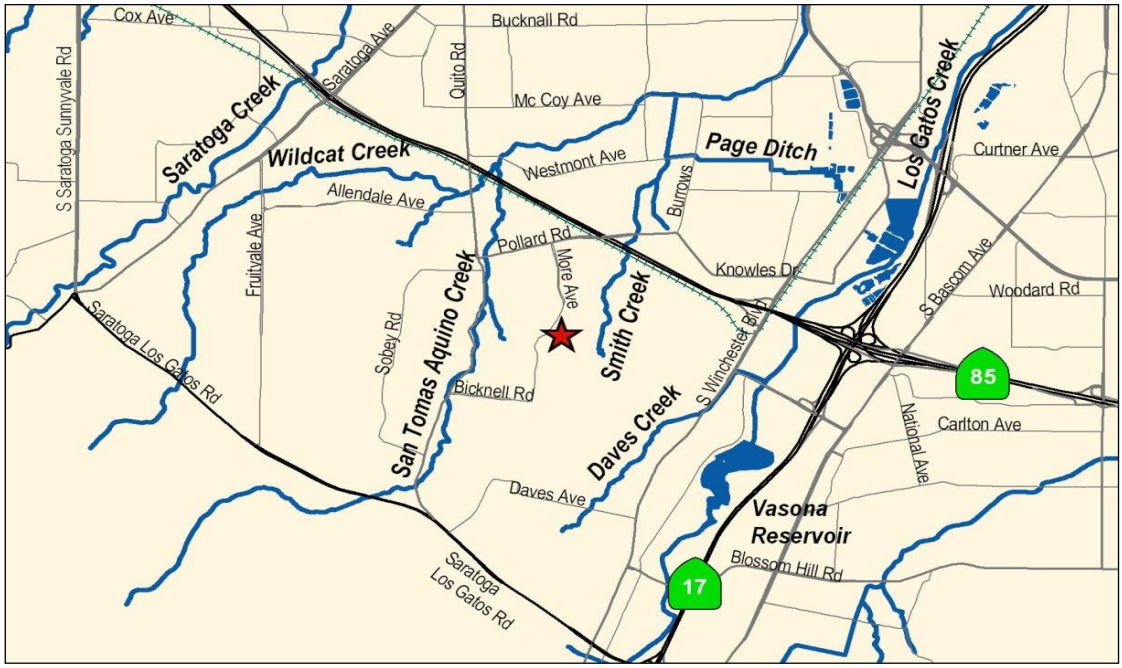
Example of a valve to be replaced or upgraded

PROJECT DESCRIPTION

This project plans, designs, and constructs modifications to the Rinconada Water Treatment Plant (RWTP), including seismically strengthening the chemical storage structures; replacing/upgrading the valves and appurtenances used to control treated water at the clearwells and the Rinconada Reservoir; repairing a damaged baffle wall in the Rinconada Reservoir; and installing a 48-inch magnetic flow meter on the treatment plant's treated water effluent pipeline. Consistent with the Facility Renewal Program, this project will accomplish the following objectives:

- Ensure plant operational reliability.
- Improve ability to maintain RWTP.
- Allow for better isolation of the treated water control valves for future work.
- Achieve greater accuracy in measuring treated water deliveries.
- Restore existing landscaping after drought.

PROJECT LOCATION

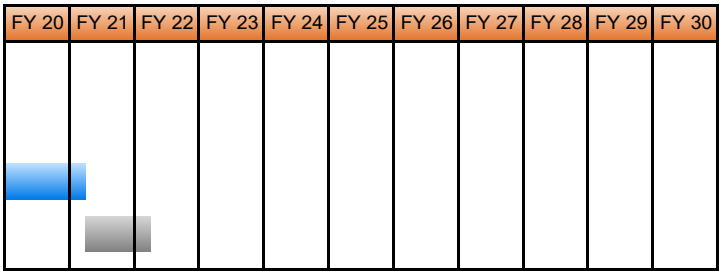


★ Project Location

SCHEDULE & STATUS

July 2009 to September 2021

Phase	Cost
Plan	465
Design	1,571
Construct	6,560
Closeout	10
	8,628



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294056-RWTP Treated Water Valves Upgrade	8,276	200	142	10	0	0	0	0	8,628
with inflation	8,276	200	142	11	0	0	0	0	8,629

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93294056-RWTP Treated Water Valves Upgrade	8,603	21	148	0	5	0	0	0	0	8,629

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	8,629
Other Funding Source	0
Total	**8,629**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operations.

USEFUL LIFE: 40 Years

Project	**Small Capital Improvements, Water Treatment**
Program	Water Supply – Treatment
Project No.	93764004
Contact	Aaron Baker abaker@valleywater.org

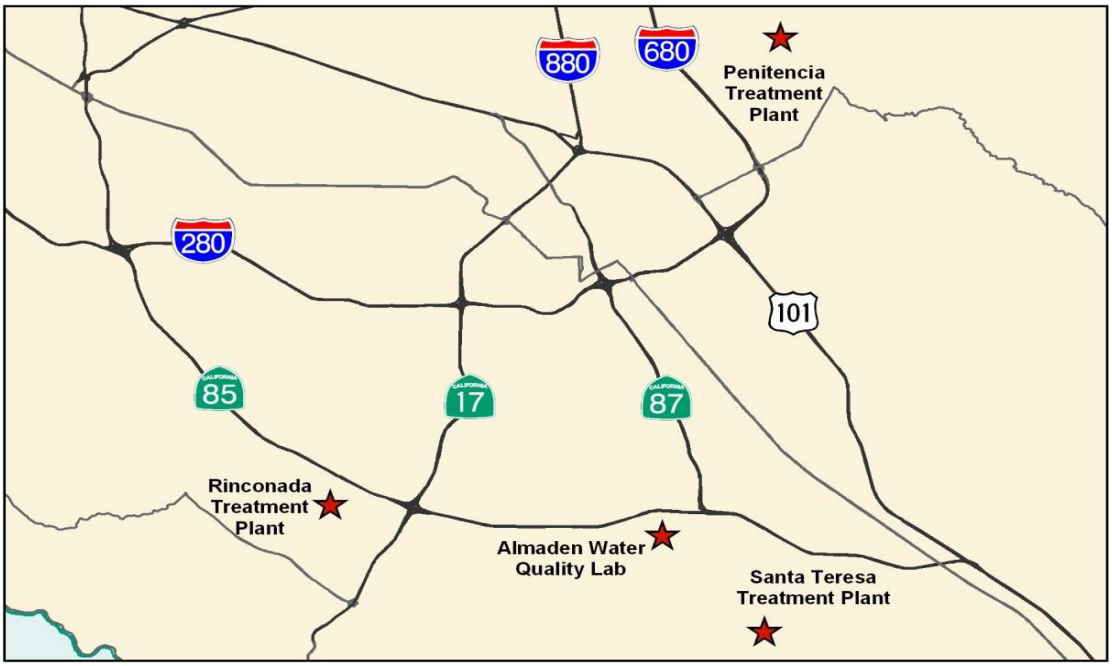
Sludge pond sediment removal at Santa Teresa Water Treatment Plant

PROJECT DESCRIPTION

This project provides resources for small capital improvements that replace or extend the life of an asset. This project implements a systematic approach of equipment replacement and renewal at the three water treatment plants and laboratory by designing and constructing improvements identified as part of Valley Water's 10-year asset management program. Typical activities of this project include pump, motor, instrumentation and valve replacement; chemical tank repairs; and large-scale renewal and replacement activities like clarifier mechanism overhaul and replacement. Planned projects to complete for Santa Teresa Water Treatment Plant (STWTP), Penitencia Water Treatment Plan (PWTP), Rinconada Water Treatment Plant (RWTP), West Pipeline, and Silicon Valley Advanced Water Purification Center include:

- Provide engineering, supplies, and services support for the Sulfuric Acid Water Quality project.
- Purchase Laboratory Information Management System.
- Complete Small Capital Projects at STWTP, RWTP, PWTP and Campbell Well Field.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

This project is part of a regularly scheduled 10-year maintenance and asset management program.

Traditional planning, design, and construction phases do not apply.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	11,353	3,035	3,504	1,096	4,716	2,658	18,949	45,311
with inflation	n/a	11,353	3,035	3,863	1,269	5,732	3,392	27,230	55,875

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93764004-Small Capital Improvements, Water Treatment	n/a	11,353	0	3,035	3,863	1,269	5,732	3,392	27,230	55,875

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Excess funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	55,875
Other Funding Source	0
Total	**55,875**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**STWTP Filter Media Replacement**
Program	Water Supply - Treatment
Project No.	93284013
Contact	Heath McMahon hmcmahon@valleywater.org

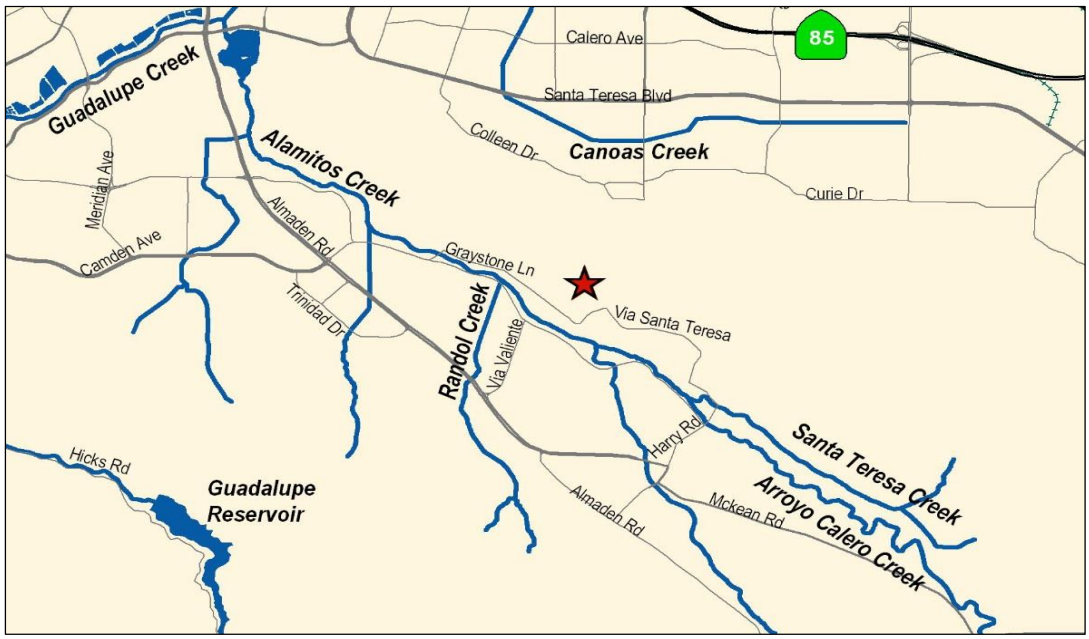
Santa Teresa Water Treatment Plant Filter Media Replacement

PROJECT DESCRIPTION

This project plans, designs and constructs improvements to the Santa Teresa Water Treatment Plant (STWTP) filter basins to ensure that STWTP maintains its operational capacity and continues to effectively serve customers, retailers, and the public with safe and high-quality drinking water. This project will accomplish the following objectives:

- Extend the service life of STWTP filter media.
- Replace the filter media in all twelve filters with sand and granular activated carbon.
- Replace the filter's damaged or deteriorated collection nozzles.

PROJECT LOCATION

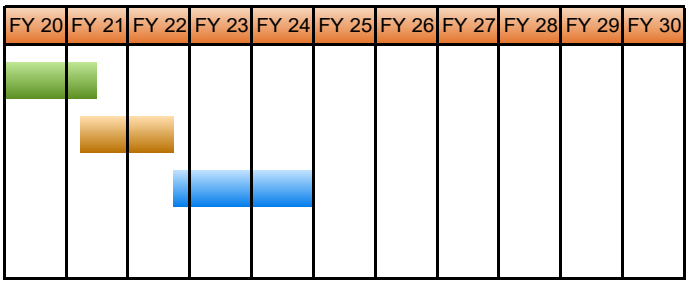


★ Project Location

SCHEDULE & STATUS

July 2019 to June 2024

Phase	Cost
Plan	798
Design	1,015
Construct	7,648
Closeout	75
	9,536



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93284013-STWTP Filter Media Replacement	0	203	444	2,711	4,611	1,567	0	0	9,536
with inflation	0	203	444	2,934	5,081	1,793	0	0	10,455

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93284013-STWTP Filter Media Replacement		203	0	444	2,934	5,081	1,793	0	0	10,455

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	10,455
Other Funding Sources	0
Total	**10,455**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: 10-15 Years

Project	**Water Treatment Plant Electrical Improvement**
Program	Water Supply - Treatment
Project No.	93084004
Contact	Heath McMahon hmcmahon@valleywater.org

Motor control center switchboard

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the electrical equipment at Penitencia Water Treatment Plant (PWTP) and Santa Teresa Water Treatment Plant (STWTP). The standby generator will be upgraded at STWTP. This project will accomplish the following objectives:

- Extend the service life of PWTP's and STWTP's electrical distribution systems
- Improve reliability and reduce maintenace at PWTP and STWTP

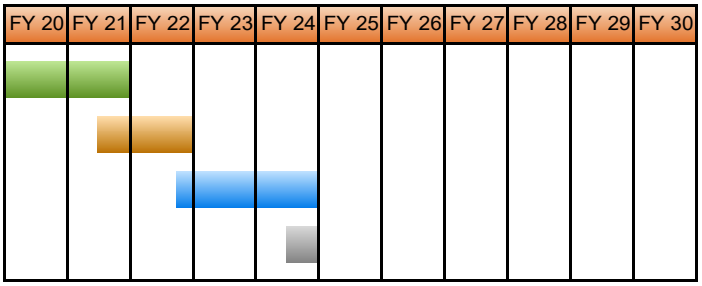
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2019 to June 2024

Phase	Cost
Plan	878
Design	1,153
Construct	8,839
Closeout	75
	10,945



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93084004-Water Treatment Plant Electrical Improvement	0	203	447	3,164	5,328	1,803	0	0	10,945
with inflation	0	203	447	3,423	5,860	2,056	0	0	11,989

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93084004-Water Treatment Plant Electrical Improvement		203	0	447	3,423	5,860	2,056	0	0	11,989

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	11,989
Other Funding Sources	0
Total	**11,989**

OPERATING COST IMPACTS

Operating costs will be determined at the conclusion of the design phase.

USEFUL LIFE: N/A

Project	**WTP Implementation Project**
Program	Water Supply - Treatment
Project No.	93044001
Contact	Bhavani Yerrapotu byerrapotu@valleywater.org

WTP Implementation Project

PROJECT DESCRIPTION

Prepare an implementation project looking out 30 years to determine the projects needed to repair, replace and/or upgrade Valley Water's water treatment plant (WTP) infrastructures, address the increasingly stringent water quality regulations, and prepare to implement projects that the Board approves. The implementation project will conclude with a programmatic environmental impact report. Facilities will include the Rinconada, Santa Teresa, Penitencia Water Treatment Plants and the Advanced Water Purification Center.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

July 2020 to June 2023

Phase	Cost
Plan	7,703
Design	-
Construct	-
Closeout	-
	7,703

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93044001-WTP Implementation Project	0	0	1,024	3,179	3,500	0	0	0	7,703
with inflation	0	0	1,024	3,505	4,052	0	0	0	8,581

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
93044001-WTP Implementation Project	0	0	0	1,024	3,505	4,052	0	0	0	8,581

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

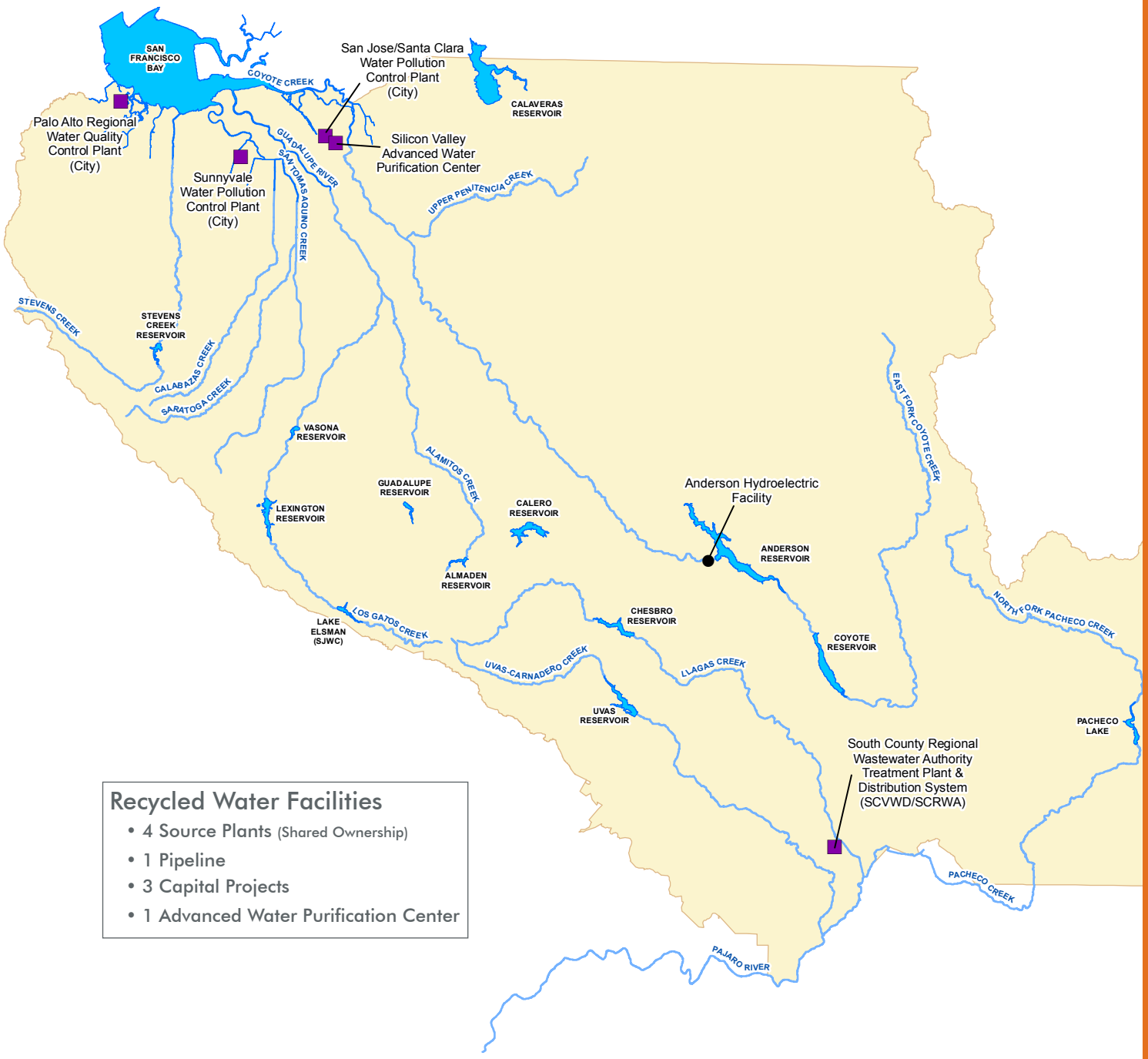
SCVWD Water Utility Enterprise Fund	8,581
Other Funding Sources	0
Total	**8,581**

OPERATING COST IMPACTS

This project is not anticipated to increase or decrease annual operating costs, as the project is a planning effort that will be used to identify future repair and upgrade projects to Water Treatment Plants. Projects identified through this implementation project will have their own operating cost impacts identified as they come online.

USEFUL LIFE: TBD

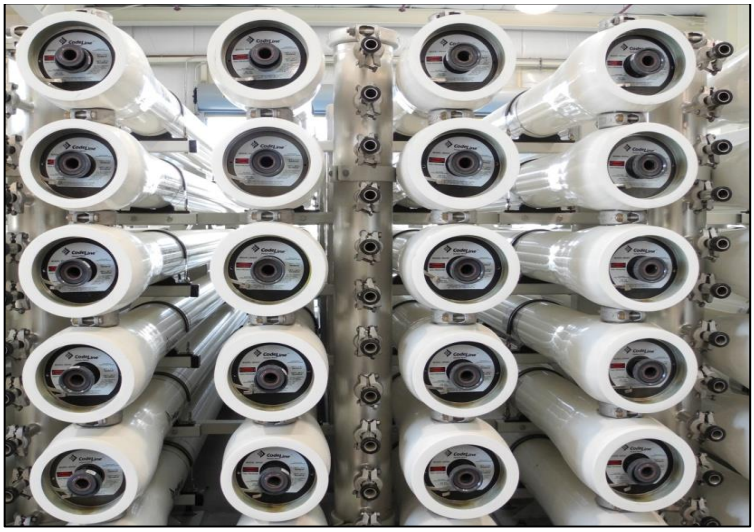
Recycled & Purified Water Facilities



Recycled Water Facilities

- 4 Source Plants (Shared Ownership)
- 1 Pipeline
- 3 Capital Projects
- 1 Advanced Water Purification Center

Project	**Expedited Purified Water Program**
Program	Water Supply – Recycled Water
Project No.	91304001s
Contact	Garth Hall ghall@valleywater.org



Reverse osmosis membranes used for water purification

PROJECT DESCRIPTION

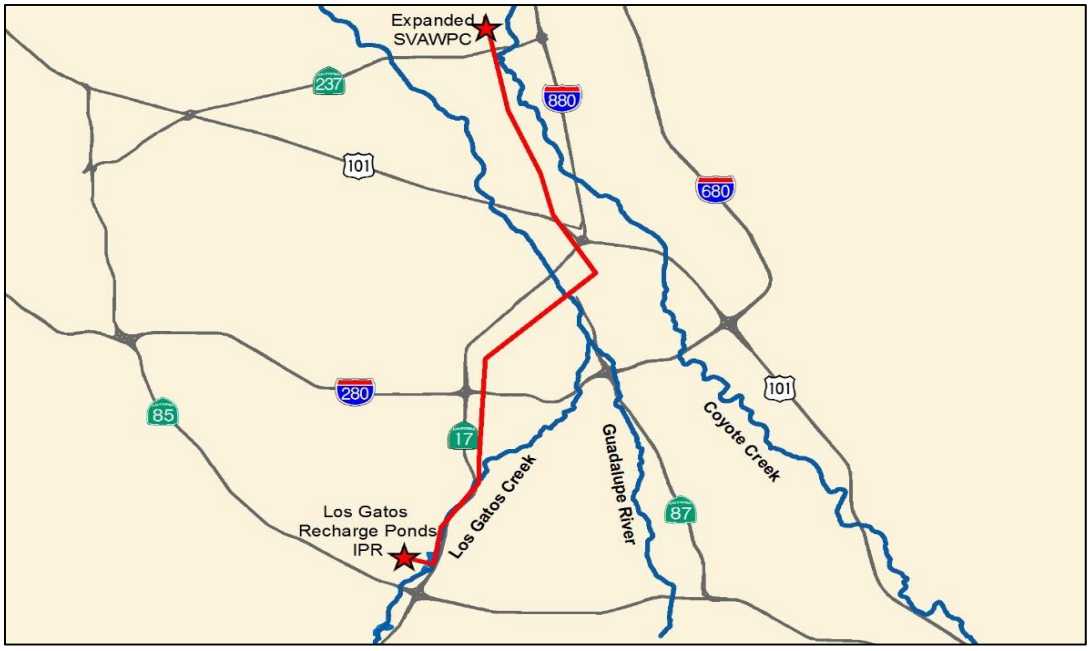
This project plans, designs, and constructs new infrastructure, proposed in Valley Water's 2012 Water Supply Master Plan, to accomplish the following objectives:

- Expand Valley Water's long-term water supply portfolio.
- Ensure a drought-proof and reliable water supply for Silicon Valley.

Project elements may include, but are not limited to:

- Expansion of the Silicon Valley Advanced Water Purification Center to produce up to an additional 24 million gallons per day of advanced purified water.
- Installation of pipelines to convey advanced purified water to Valley Water's existing groundwater recharge ponds for indirect potable reuse, or to Valley Water's conventional surface water treatment plants for use as raw water augmentation (direct potable reuse).
- Installation of purified water injection wells at strategic locations to improve groundwater basin management.

PROJECT LOCATION

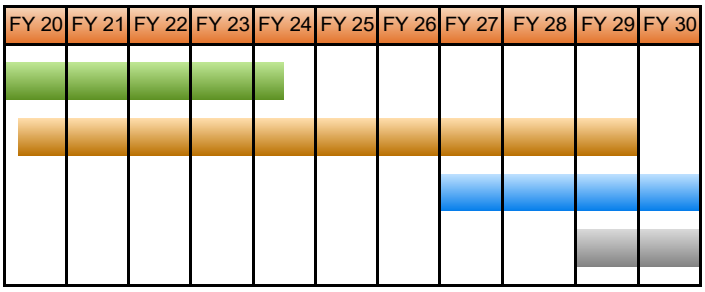


★ Project Location

SCHEDULE & STATUS

April 2015 to June 2032

Phase	Cost
Plan	17,218
Design	50,091
Construct	454,119
Closeout	-
	531,557



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	20,064	2,480	2,250	1,500	1,500	7,237	7,987	488,025	531,043
with inflation	20,064	2,480	2,250	1,654	1,736	8,797	10,194	655,973	703,147
91284009 - Silicon Valley Advanced Water Purification Center Expansion	479	0	0	0	0	0	0	0	479
with inflation	479	0	0	0	0	0	0	0	479
91384001 - Purified Water Pipelines	35	0	0	0	0	0	0	0	35
with inflation	35	0	0	0	0	0	0	0	35
TOTAL	**20,578**	**2,480**	**2,250**	**1,500**	**1,500**	**7,237**	**7,987**	**488,025**	**531,557**
with inflation	**20,578**	**2,480**	**2,250**	**1,654**	**1,736**	**8,797**	**10,194**	**655,973**	**703,661**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91304001 - Indirect Potable Water Reuse Projects - Planning	22,703	2,480	2,639	0	1,265	1,736	8,797	10,194	655,973	703,147
91284009 - Silicon Valley Advanced Water Purification Center Expansion	910	0	431	0	0	0	0	0	0	910
91384001 - Purified Water Pipelines	256	0	221	0	0	0	0	0	0	256
TOTAL	**23,869**	**2,480**	**3,291**	**0**	**1,265**	**1,736**	**8,797**	**10,194**	**655,973**	**704,313**

Adjusted Budget includes adopted budget plus a planned budget adjustments. Funding exceeds planned expenditures by approximately $652,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	704,313
Other Funding Sources	0
Total	**704,313**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined during the planning phase.

USEFUL LIFE: Not Available

Project	**Land Rights - South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Project No.	91094001
Contact	Heath McMahon hmcmahon@valleywater.org

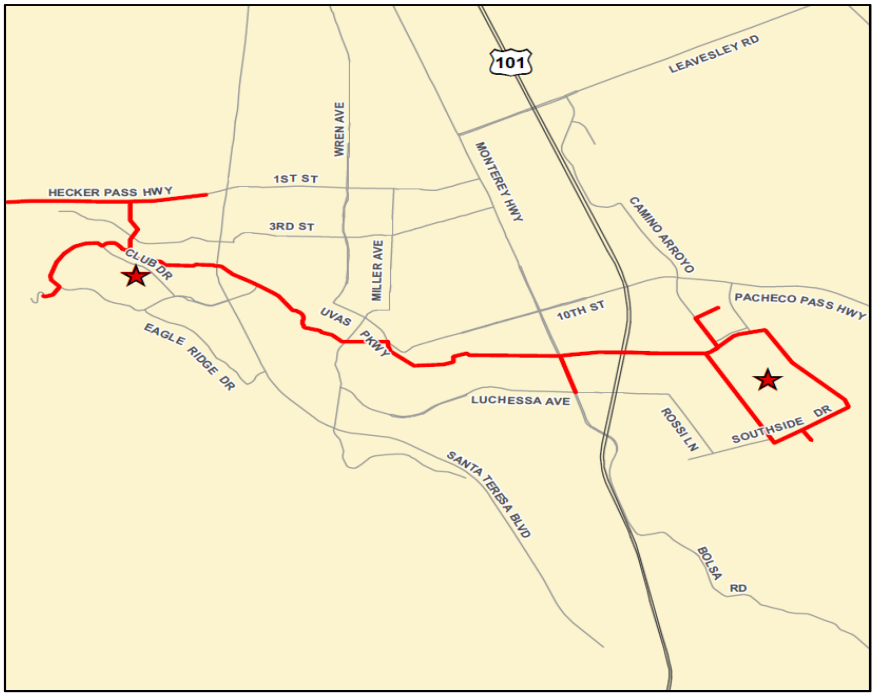
Restricted land access puts recycled water delivery at risk.

PROJECT DESCRIPTION

Valley Water is contractually required to maintain and operate the recycled water pipeline in South County as a part of an agreement with the South County Regional Wastewater Authority (SCRWA). It has been determined that there are insufficient and expired land rights to Valley Water's recycled water pipeline in segments near the Eagle Ridge Golf Course and along Hecker Pass road, which places Valley Water in a precarious legal position. In the event of a pipe failure, Valley Water's rights to legally operate and maintain the recycled water conveyance system may be challenged; thus, our commitment to deliver recycled water to its South County customers is at risk.

Valley Water's ongoing implementation of the SCRWA Recycled Water Master Plan is impetus to affirm the pipeline easements and Valley Water access rights. Delaying resolution of this outstanding issue may cause difficulties in maintaining the pipelines, and will negatively impact our long-term commitment to increase recycled water use in South County.

PROJECT LOCATION

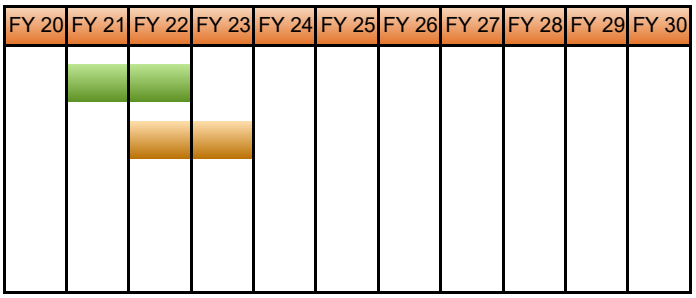


Project Location
Project Location

SCHEDULE & STATUS

July 2020 to June 2023

Phase	Cost
Plan	825
Design	5,979
Construct	-
Closeout	-
	6,804



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91094001-Land Rights - South County Recycled Water Pipeline	0	0	204	3,521	3,079	0	0	0	6,804
with inflation	0	0	204	3,882	3,564	0	0	0	7,650

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91094001-Land Rights - South County Recycled Water Pipeline	0	0	0	204	3,882	3,564	0	0	0	7,650

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	7,650
Other Funding Sources	0
Total	**7,650**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: All land rights obtained will be held in perpetuity.

Project	**South County Recycled Water Pipeline**
Program	Water Supply – Recycled Water
Project No.	91094007s
Contact	Heath McMahon hmcmahon@valleywater.org

Purple recycled water pipe waiting to be laid during construction of the Immediate Term project

PROJECT DESCRIPTION

This project plans, designs, and constructs water recycling systems based on the South County Recycled Water Master Plan accepted in December 2004 to improve system redundancy, reliability, and capacity. The current Master Plan report presents a 20-year capital program for expanding water recycling in South County in three phases; Immediate Term, Short Term, and Long Term:

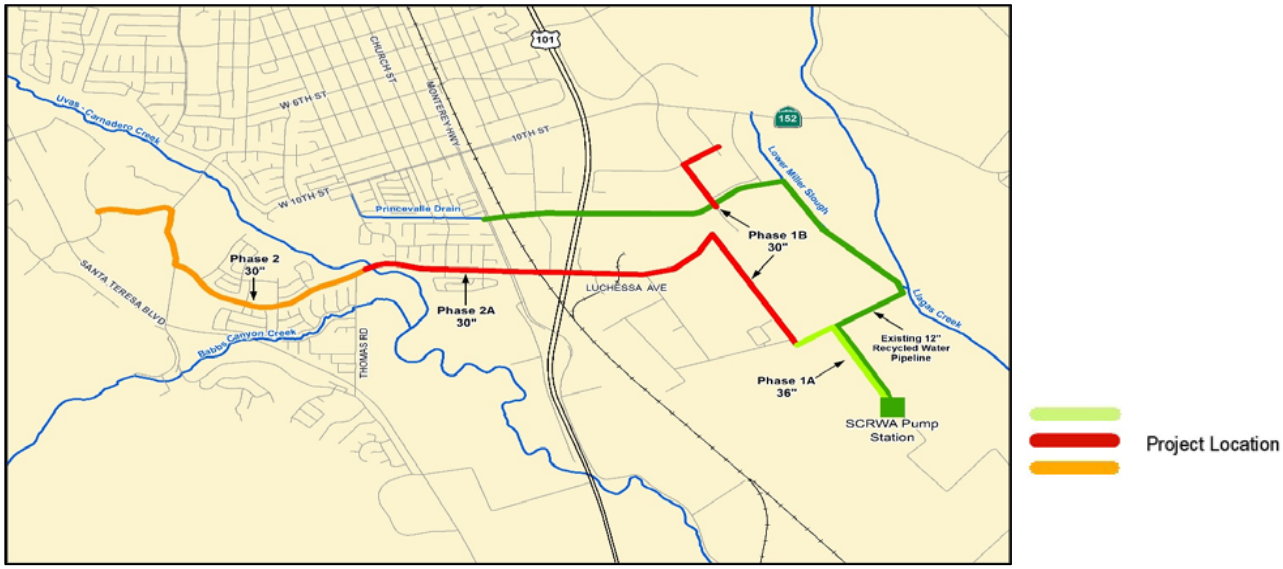
Completed:

- 91094007 Recycled Water South County Masterplan (Immediate Term) which included design and construction of recycled water storage, pumping, and distribution facilities for agricultural use near the SCRWA treatment plant.
- 91094008 Recycled Water South County Masterplan (Short Term 1A), installation of approximately 3,000 feet of 30-inch and 36-inch pipeline.

Currently Underway:

- 91094009 South County Recycled Water Pipeline (Short Term) Phase 1B will construct an additional 14,000 linear feet of pipeline.
- 91094010 South County Recycled Water Pipeline (Short Term) Phase 2 will be completed through cost-sharing opportunities with the City of Gilroy and land developers to construct approximately 3,900 linear feet of 30-inch diameter pipe.
- 91094010 South County Recycled Water Pipeline (Long Term) Phase 1 to be completed through cost-sharing opportunities with the land developers through coordination by the City of Gilroy to construct approximately 9,200 linear feet of 24-inch diameter pipe.

PROJECT LOCATION

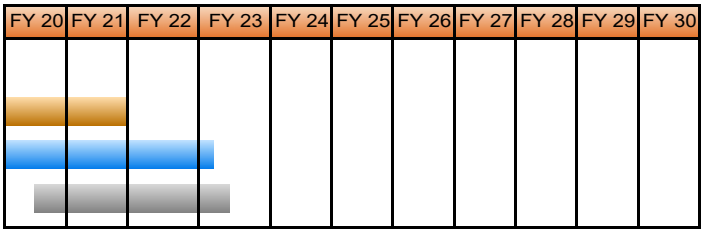


SCHEDULE & STATUS

July 2009 to December 2022

The schedule chart shows Short-Term Phase 1B and Phase 2 projects only. The Immediate-Term and Short-Term Phase 1A projects are complete.

Phase	Cost
Plan	3,104
Design	10,895
Construct	37,051
Closeout	155
	55,851



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	3,257
with inflation	3,257	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	5,391
with inflation	5,391	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	10,106	1,793	8,151	14,661	4,664	0	0	0	39,375
with inflation	10,106	1,793	8,151	15,195	4,993	0	0	0	40,238
91094010-South County Recycled Water Pipeline - Short Term 2	7,427	401	0	0	0	0	0	0	7,828
with inflation	7,427	401	0	0	0	0	0	0	7,828
TOTAL	**26,181**	**2,194**	**8,151**	**14,661**	**4,664**	**0**	**0**	**0**	**55,851**
with inflation	**26,181**	**2,194**	**8,151**	**15,195**	**4,993**	**0**	**0**	**0**	**56,714**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
91094007-Recycled Water South County Masterplan - Immediate Term	3,257	0	0	0	0	0	0	0	0	3,257
91094008-Recycled Water South County Masterplan - Short Term 1A	5,391	0	0	0	0	0	0	0	0	5,391
91094009-South County Recycled Water Pipeline - Short Term 1B	19,801	0	7,902	249	15,195	4,993	0	0	0	40,238
91094010-South County Recycled Water Pipeline - Short Term 2	8,108	0	280	0	0	0	0	0	0	8,108
TOTAL	**36,557**	**0**	**8,182**	**249**	**15,195**	**4,993**	**0**	**0**	**0**	**56,994**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $280,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	50,888
South County Regional Wastewater Authority	811
United States Bureau of Reclamation (USBR) ARRA	1,295
United States Bureau of Reclamation (USBR) Title 16	4,000
Total	**56,994**

OPERATING COST IMPACTS

Estimated Valley Water share of the operating and maintenance costs are $8,000 per year for the Immediate-Term phase, beginning in FY 2007 and an additional $25,000 for the Short-Term Phase 1, beginning in FY 2019. Increases for Immediate Term are primarily labor costs for operating the new 3mg reservoir and its pump station. Increases for Short Term are labor and materials to maintain the 42,000 feet of new pipeline, exercising valves and cathodic protection.

USEFUL LIFE: Pipelines–50 Years, Pumps–20 Years

Flood Protection

Flood Protection Capital Improvements

FLOOD PROTECTION OVERVIEW

Of the approximately 800 miles of creeks in Santa Clara County, Valley Water has jurisdiction over and manages approximately 275 miles to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations." Valley Water's goals are further defined in E-3.1, "Provide natural flood protection for residents, businesses, and visitors" and E-3.2, "Reduce potential for flood damages." The 275 miles of creeks are located in five watersheds: Lower Peninsula, West Valley, Guadalupe, Coyote, and Uvas/Llagas. Valley Water administers an asset management program for its flood protection infrastructure. The program includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended throughout its useful life.

Fifty years of flood protection management has significantly reduced the intensity and frequency of flooding in Santa Clara County. By 2005, Valley Water had provided flood protection to 93,253 of the 166,526 parcels in the floodplain and another approximately 10,445 have been protected since then.

The voters in Santa Clara County have supported Valley Water's flood protection efforts by approving benefit assessment funding in 1982, 1986, and 1990. Voters also approved a special parcel tax in 2000 and 2012 to fund the continuation of Valley Water's flood protection capital improvements; specifically, moving upstream from the completed downstream work or starting new work on creeks that have not had flood protection work.

Lower Peninsula Watershed

Major Capital Improvements Completed

- San Francisquito Creek from the S.F. Bay to Highway 101 (Clean, Safe Creeks/Safe, Clean Water)
- Adobe Creek from El Camino to West Edith Ave.
- Barron Creek
- Matadero Creek from Palo Alto Flood Basin to Barron Creek
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)

Major Capital Improvements Identified in the CIP

- Palo Alto Flood Basin Structure Improvements
- Permanente Creek from S.F. Bay to Foothill Expressway (Safe, Clean Water)
- San Francisquito Creek from Highway 101 to Searsville Dam (Safe, Clean Water)

West Valley Watershed

Major Capital Improvements Completed

- Calabazas Creek from Guadalupe Slough to Wardell Road
- San Tomas Creek from Southern Pacific Railroad to Cabrillo Avenue
- Saratoga Creek from San Tomas Creek to Lawrence Expressway

Major Capital Improvements Identified in the CIP

- Sunnyvale East and West Channels (Clean, Safe Creeks)

Guadalupe Watershed

Major Capital Improvements Completed

- Alamitos Creek
- Guadalupe River–Lower from Alviso Marina to Interstate 880
- Guadalupe River–Downtown from Interstate 880 to Interstate 280

Major Capital Improvements Identified in the CIP

- Guadalupe River–Upper, Interstate 280 to Blossom Hill Road (Clean, Safe Creeks/Safe, Clean Water)
- Guadalupe River, Tasman Drive to I-880

Coyote Watershed

Major Capital Improvements Completed

- Coyote Creek from S.F. Bay to Montague Expressway

- Lower Penitencia Creek from Coyote Creek to Tasman Drive
- Lower Silver Creek from Coyote Creek to Cunningham Ave. (Reaches 1-6)
- Wrigley Ford Creek

Major Capital Improvements Identified in the CIP

- Berryessa Creek from Calaveras Boulevard to Interstate 680 (Clean, Safe Creeks)
- Berryessa Creek from Lower Penitencia Creek to Calaveras Boulevard
- Coyote Creek Montague Expressway to Tully Road (Clean, Safe Creeks/Safe, Clean Water)
- Upper Penitencia Creek from Coyote Creek to Dorel Drive (Safe, Clean Water)

Uvas/Llagas Watershed

Major Capital Improvements Completed

- Llagas Creek–Lower from Pajaro River to Buena Vista Avenue
- Uvas Creek

Major Capital Improvements Identified in the CIP

- Llagas Creek-Lower, Capacity Restoration from Buena Vista Avenue to Pajaro River
- Llagas Creek–Upper, Buena Vista Avenue to Llagas Road (Clean, Safe Creeks/Safe, Clean Water)

Multiple Watersheds

Major Capital Improvements Identified in the CIP

- San Francisco Bay Shoreline (Safe, Clean Water)
- Watershed Asset Rehabilitation Program

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

A financial analysis of the Watershed and Stream Stewardship Fund and Safe, Clean Water Fund, the funding sources for flood protection capital improvements, was conducted to determine if there are limitations to funding all of the projects proposed for the FY 2021-25 CIP.

Funding required for portions of several CIP projects is contingent on grants and partnership agreements that are under development and not currently secured. As Valley Water works through the process to secure funding the project schedules may be adjusted. Projects with unsecured funding include:

- San Francisquito Creek, upstream of Hwy 101
- Upper Llagas, Phase 2 (Reaches 5, 6, 7B, 8, and 14)

It is understood that new capital projects have an impact on future operations and maintenance, and this is included in the financial analysis. Periodically throughout the project, projections of this impact are updated to reflect changes in the project elements.

Valley Water staff collects high water marks from significant storm events. Following extreme weather in 2017, Valley Water conducted topographic surveys and collected information on vegetation growth. The analyses, completed in 2018 for Guadalupe River, indicated that a section of the Guadalupe River, from upstream of Tasman Drive to Airport Parkway, no longer has conveyance capacity for the 100-year event for which it was designed. Valley Water is actively exploring options to restore the river to 100-year flow capacity and has performed significant vegetation removal during the FY 2019-20 stream maintenance season, but there are many challenges ahead. Preliminary assessments indicate that vegetation removal as permitted under the existing SMP alone will not be enough to restore the design conveyance. The Guadalupe River, Tasman Drive

to I-880 Project was included in the FY 2020-24 CIP to investigate options for immediate interim measures and to conduct an alternatives analysis and environmental evaluation of additional measures, such as construction of a floodwall or levee raising to re-establish flow conveyance capacity and freeboard for a 100-year event.

The project's funding has been increased by $95 million in the FY 2021-25 CIP to reflect all future planning, design and construction costs to restore design flow conveyance capacity.

The Palo Alto Flood Basin Tide Gate Structure Improvement Project increased in cost by $20 million due to increased construction phase cost estimates

The voter approved Safe, Clean Water Program is providing funding for some of the highest priority flood protection projects, including:

- Permanente Creek, San Francisco Bay to Foothill Expy.
- San Francisquito Creek, SF Bay to Middlefield Road
- Sunnyvale East & West Channels
- Upper Guadalupe River, I-280 to Blossom Hill Road
- Upper Penitencia Creek, Coyote to Dorel Drive
- Berryessa Creek, Calaveras Blvd. to I-680
- Coyote Creek, Montague Expy. to I-280
- Llagas Creek-Upper, Buena Vista Avenue to Llagas Road
- San Francisco Bay Shoreline - Design and Partial Construction of EIA 11 and Planning for other EIAs

An implementation schedule for Safe, Clean Water projects is available in Appendix C.

Delays in federal funding for many of the U.S. Army Corps of Engineers (USACE) projects have extended project schedules beyond the dates committed by Valley Water. Therefore, Valley Water is evaluating the option of proceeding with the local funding option on several of these projects.

The following high priority flood protection projects, unfunded or partially funded, are of major concern to meet the Board's Ends Policy E–3, "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."

Partially Funded and Unfunded CIP Projects

- San Francisquito Creek 100-year flood protection upstream of Highway 101
- Llagas Creek-Upper, Buena Vista Avenue to Llagas Road
- Upper Penitencia Creek, Coyote Creek to Dorel Drive (USACE funding is unlikely)

Flood Protection Capital Improvements

Flooding on Coyote Creek caused by severe storm in February 2017 led Valley Water to reevaluate the schedule, level of flood protection, and funding sources for the Coyote Creek Project. A public hearing was held on June 13, 2017 to extend the Coyote Creek project to Tully Road and evaluate a project that would provide protection from a 20- to 25-year flood event. A preliminary cost range of $40-85 million was identified through a planning study and presented to the Board in December 2019. Based upon the project's remaining secured funding of approximately $28 million, the project was deemed to have a shortfall between $12-57 million.

Staff worked with the Board CIP Committee to identify possible funding for construction of this project. In response to a recommendation from the Board CIP Committee, on December 17, 2019, the Board directed staff to reallocate $21 million (uninflated dollars) from the Upper Penitencia Creek from Coyote Creek to Dorel Drive Project (Safe, Clean Water) to the Coyote Creek, Montague Expy. to Tully Road Project. The reallocation of funds would go towards addressing the Coyote Creek Project's shortfall, while still leaving sufficient funds in the Upper Penitencia Creek Project to construct the local-funding-only project.

Additionally, in response to a Board CIP Committee recommendation, the Board held a public hearing on January 14, 2020 to modify the Upper Llagas Creek Flood Protection Project local-funding-only key performance indicator (KPI) to increase the length of the project to be built by the available local funds from approximately 2.9 miles to approximately 4.9 miles. This modified KPI entails constructing Reaches 4 and 5 (portion), 7a and 8 (portion) as well as the onsite compensatory mitigation at Lake Silveira. The remaining Project elements, namely Reaches 5 (portion), 6, 7b, 8 (portion) and 14, will be built later once external or other funding sources become available.

Flood Protection Capital Improvements

The following table is a project funding schedule for flood protection capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2019-20.

Flood Protection Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
	LOWER PENINSULA WATERSHED										
10394001	Palo Alto Flood Basin Tide Gate Structure Improvements	2,474	1,918	1,512	82	5,379	9,627	7,350	5,935	-	32,765
10244001s	Permanente Creek, SF Bay to Foothill Expressway	99,330	7,560	479	-	-	-	-	-	-	106,890
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam (E5)	59,946	2,805	783	370	5,764	12,831	7,567	-	-	89,283
	WEST VALEY WATERSHED										
26074002	Sunnyvale East and West Channels	30,997	4,441	15,413	2,032	17,829	14,650	486	-	-	70,435
	GUADALUPE WATERSHED										
30114002	Canoas Creek, Rodent Damage Repair	7,307	-	420	-	-	-	-	-	-	7,307
30154019	Guadalupe River Tasman Dr - I-880	90	1,000	9	1,828	2,824	2,499	29,215	30,732	30,892	99,080
26154001s	Guadalupe River–Upper, I-280 to Blossom Hill Road (E8)	134,556	86	24,374	-	12,150	18,091	2,345	38	3,149	170,415
	COYOTE WATERSHED										
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	54,552	1	23	27	-	-	-	-	-	54,580
40174004s	Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd	112,266	-	4,903	45	923	162	-	-	71,236	184,632
26174043	Coyote Creek, Montague Expressway to Tully Road	14,098	941	1,014	2,197	7,100	21,186	19,117	1,691	-	66,330
40264011	Cunningham Flood Detention Certification	11,251	555	30	2	33	-	-	-	-	11,841
40334005	Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	9,297	1,989	1,038	7,743	7,817	637	328	-	-	27,811
40264007s	Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	101,549	740	765	167	55	58	-	-	-	102,569
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	13,195	1,812	1,261	1,381	2,774	232	2,201	1,711	13,485	36,791
	UVAS LLAGAS WATERSHED										
50284010	Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	6,947	-	2,809	-	-	3,404	3,401	-	-	13,752
26174051s	Llagas Creek–Upper, Buena Vista Avenue to Llagas Road	113,330	12,415	5,418	46,273	48,576	47,278	11,816	3,756	1,593	285,037
	MULTIPLE WATERSHEDS										
00044026s	San Francisco Bay Shoreline (E7)	35,910	36,432	644	11,143	22,964	2,399	35,159	766	266	145,039
62084001	Watersheds Asset Rehabilitation Program	24,455	11,481	-	3,531	2,489	2,695	2,790	2,889	140,555	190,885
	TOTAL	831,550	84,176	60,895	76,821	136,677	135,749	121,775	47,518	261,176	1,695,442

The following table shows funding requirements from each funding source for flood protection capital improvements.

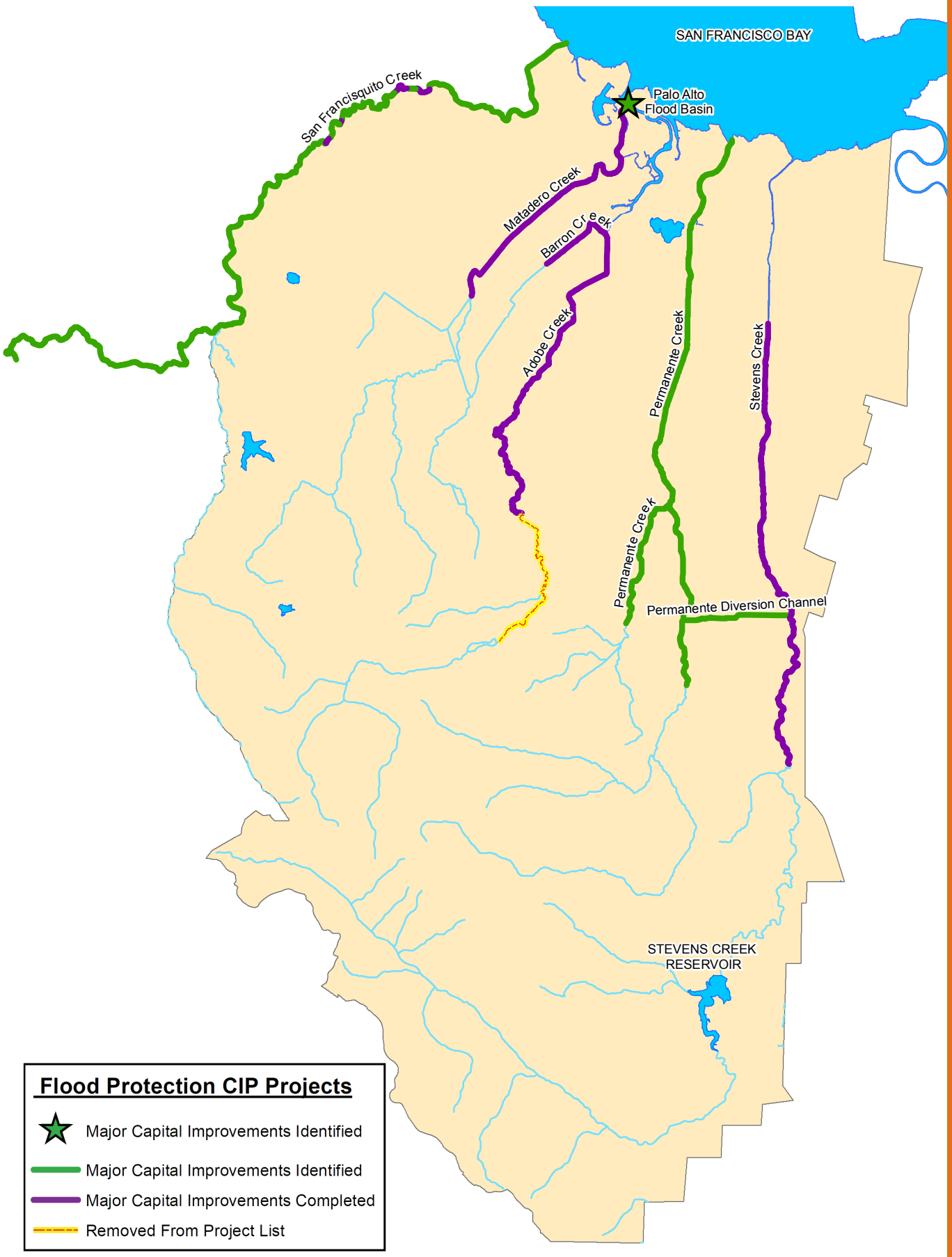
Flood Protection - Funding Sources ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
12	Watershed Stream Stewardship Fund	381,441	54,130	16,548	28,119	51,710	38,916	95,552	43,565	186,326	879,759
26	Safe, Clean Water and Natural Flood Protection Fund	450,109	30,046	44,347	48,702	84,967	96,833	26,223	3,953	74,850	815,683
	TOTAL	831,550	84,176	60,895	76,821	136,677	135,749	121,775	47,518	261,176	1,695,442

FY 2019-20 Funds to be reappropriated

This page intentionally left blank.

Lower Peninsula Watershed



Project	**Palo Alto Flood Basin Tide Gate Structure Improvements**
Program	Flood Protection - Lower Peninsula Watershed
Project No.	10394001
Contact	Ngoc Nguyen nnguyen@valleywater.org

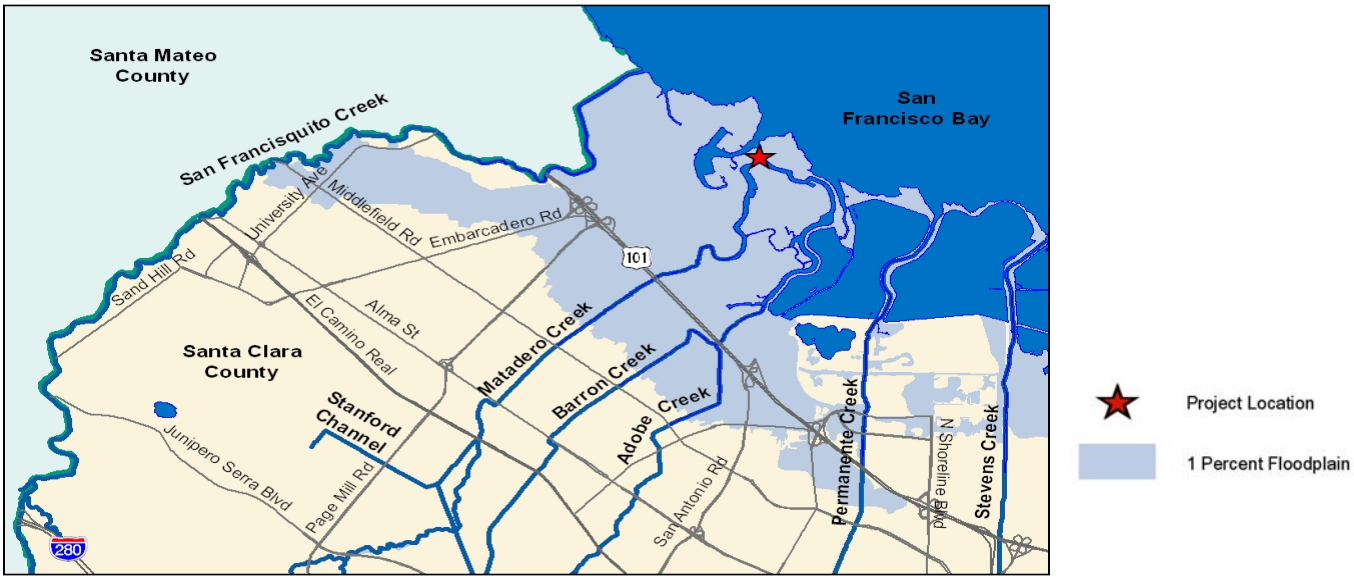
View from the west side of the Palo Alto tide gates facing east

PROJECT DESCRIPTION

This project plans, designs, and constructs a replacement tide gate structure for the Palo Alto Flood Basin to accomplish the following objectives:

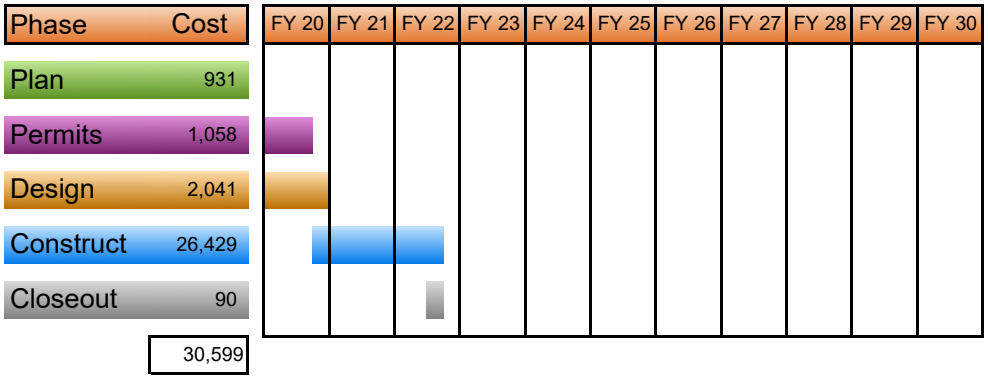
- Prepare an Emergency Action Plan and coordinate with the City of Palo Alto.
- Mitigate potential failure of the existing tide gates structure.
- Reduce the possibility of flooding in lower reaches of Matadero, Adobe, and Barron Creeks.
- Adapt to future sea level rise scenarios.
- Coordinate with the Strategy to Advance Flood protection, Ecosystems and Recreation along San Francisco Bay project, the South Bay Shoreline project, and the Mountain View Ponds project.
- Protect habitat in the Palo Alto Flood Basin and around the work area.

PROJECT LOCATION



SCHEDULE & STATUS

November 2018 to January 2022



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	1,429	1,451	1,594	5,030	8,985	6,785	5,325	0	30,599
with inflation	1,429	1,451	1,594	5,379	9,627	7,350	5,935	0	32,766

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10394001-Palo Alto Flood Basin Tide Gate Structure Improvements	2,474	1,918	1,512	82	5,379	9,627	7,350	5,935	0	32,766

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed&Stream Stewardship Fund	32,766
Other Funding Sources	0
Total	**32,766**

OPERATING COST IMPACTS

Operating cost impacts are anticipated and will be determined at the completion of the construction phase.

Project	**Permanente Creek, San Francisco Bay to Foothill Expressway**
Program	Flood Protection – Lower Peninsula Watershed
Project No.	10244001s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Permanente Creek, looking downstream at the golf course foot bridge

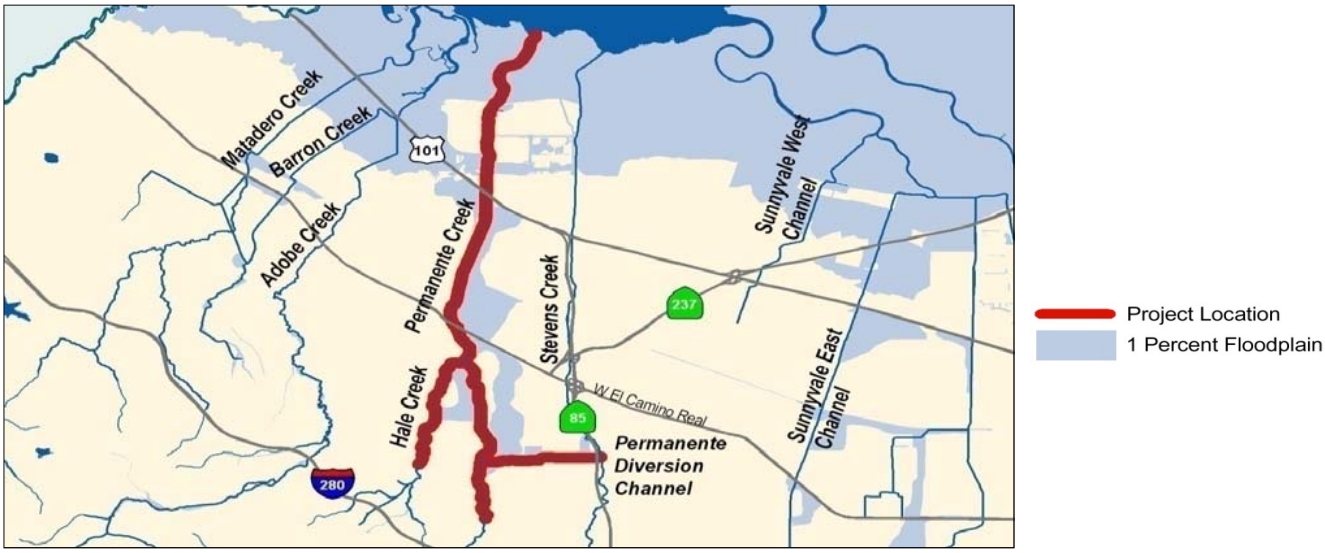
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along 10.6 miles of Permanente Creek, from San Francisco Bay to Foothill Expressway, Hale Creek from Foothill Expressway to its confluence with Permanente Creek, and the diversion structure between Permanente and Stevens Creeks, to accomplish the following objectives:

- Provide flood protection to 1,664 parcels, including Middlefield Road and Central Expressway.
- Reduce erosion and sedimentation, reduce maintenance costs, and improve safety and stability of the failing channel on Permanente Creek from the San Francisco Bay to Foothill Expressway.
- Provide environmental restoration and enhancement benefits, where opportunities exist.
- Provide recreation enhancements, where opportunities exist.
- Provide natural flood protection by taking a multiple-objective approach.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

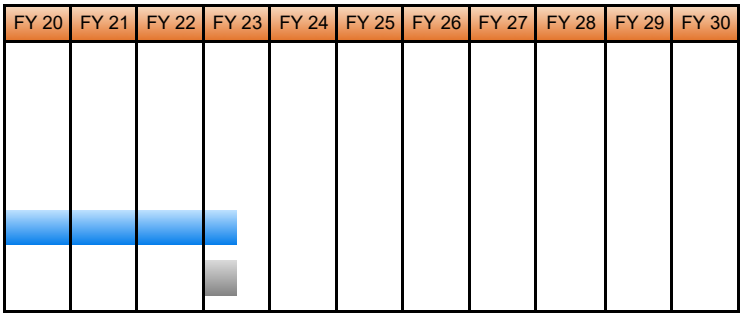


SCHEDULE & STATUS

July 2001 to December 2022

Construction includes multiple contract phases and three years of plant establishment monitoring.

Phase	Cost
Plan	10,049
Permits	3,799
Design	17,302
Construct	65,044
Closeout	50
	106,659



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,363	0	0	0	0	0	0	0	17,363
with inflation	17,363	0	0	0	0	0	0	0	17,363
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	81,479	7,569	228	20	0	0	0	0	89,296
with inflation	81,479	7,569	228	22	0	0	0	0	89,298
TOTAL	98,842	7,569	228	20	0	0	0	0	106,659
with inflation	98,842	7,569	228	22	0	0	0	0	106,661

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10244001-Permanente Ck, Bay to Foothill Expwy – Lower Peninsula Fund	17,541	0	178	0	0	0	0	0	0	17,541
26244001-Permanente Ck, Bay to Foothill Expwy – Clean, Safe Creeks Fund	81,789	7,560	301	0	0	0	0	0	0	89,349
TOTAL	**99,330**	**7,560**	**479**	**0**	**0**	**0**	**0**	**0**	**0**	**106,890**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately $229,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	17,541
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	88,326
City of Mountain View	1,023
Total	**106,890**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $360,000 per year, beginning in FY23. Increases in operations and maintenance costs include sediment removal at three flood detention sites, and bypass channel inlet and outlet operations and maintenance.

USEFUL LIFE: 30+ Years

Project	**San Francisquito Creek, San Francisco Bay through Searsville Dam**
Program	Flood Protection – Lower Peninsula Watershed
Project No.	10284007s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Upstream face of Pope/Chaucer Street with water surface approximately two feet below the soffit

PROJECT DESCRIPTION

This project provides coordination and support to the San Francisquito Joint Powers Authority, in partnership with the U.S. Army Corps of Engineers, to complete planning and design documents for an approved project alternative on San Francisquito Creek, from San Francisco Bay through Searsville Dam. This project will accomplish the following objectives:

- Provide flood protection.
- Reduce bank erosion and sedimentation-related impacts along San Francisquito Creek.
- Avoid potential adverse impacts on fish and wildlife habitats.
- Minimize impacts to the creek's environmental resources and restore the riparian corridor where feasible.

The San Francisquito Flood Protection project will provide 100-year flood protection from San Francisco Bay to Highway 101 and replace two bridges between Highway 101 and Middlefield Road.

This project is accounted for in the following: (10284007 & 10284008 are Completed)

- 26284001 – SF Bay through Searsville Dam
- 26284002 – Construction - San Francisco Bay to Middlefield Rd.

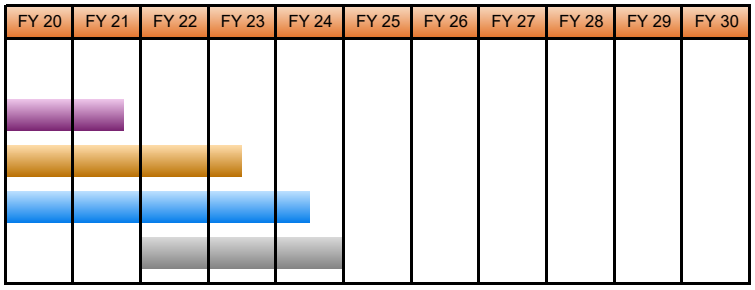
This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project E5. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

June 2003 to June 2024

Phase	Cost
Plan	4,313
Permits	1,617
Design	16,490
Construct	60,943
Closeout	125
	86,352



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10284007-San Francisquito Ck, Bay-Searsville Dam	3,740	0	0	0	0	0	0	0	3,740
with inflation	3,740	0	0	0	0	0	0	0	3,740
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	1,614
with inflation	1,614	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,671	111	0	0	0	0	0	0	6,782
with inflation	6,671	111	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	46,537	2,971	1,098	5,375	11,610	6,625	0	0	74,216
with inflation	46,537	2,971	1,153	5,764	12,831	7,567	0	0	76,822
TOTAL	**58,562**	**3,082**	**1,098**	**5,375**	**11,610**	**6,625**	**0**	**0**	**86,352**
with inflation	**58,562**	**3,082**	**1,153**	**5,764**	**12,831**	**7,567**	**0**	**0**	**88,958**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
10284007-San Francisquito Ck, Bay-Searsville Dam	4,064	0	324	0	0	0	0	0	0	4,064
10284008-San Francisquito Ck, Early Implementation	1,614	0	0	0	0	0	0	0	0	1,614
26284001-San Francisquito Ck, Bay-Searsville Dam	6,782	0	0	0	0	0	0	0	0	6,782
26284002-San Francisquito Ck - Construction - SF Bay to Middlefield Rd.	47,486	2,805	783	370	5,764	12,831	7,567	0	0	76,822
TOTAL	**59,946**	**2,805**	**1,107**	**370**	**5,764**	**12,831**	**7,567**	**0**	**0**	**89,282**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds total planned expenditures by approximately $324,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	5,678
SCVWD Safe, Clean Water and Natural Flood Protection Fund	58,341
JPA and Member Agencies (D/S Funding)	5,480
Unsecured Grants and Partnerships (U/S Funding)	19,783
Total	**89,282**
San Francisquito Joint Powers Authority	11,040
U.S. Army Corps of Engineers - In-kind Services	3,000
County of San Mateo - In-kind Services	1,500
City of Palo Alto (Newell Road Bridge)	7,100

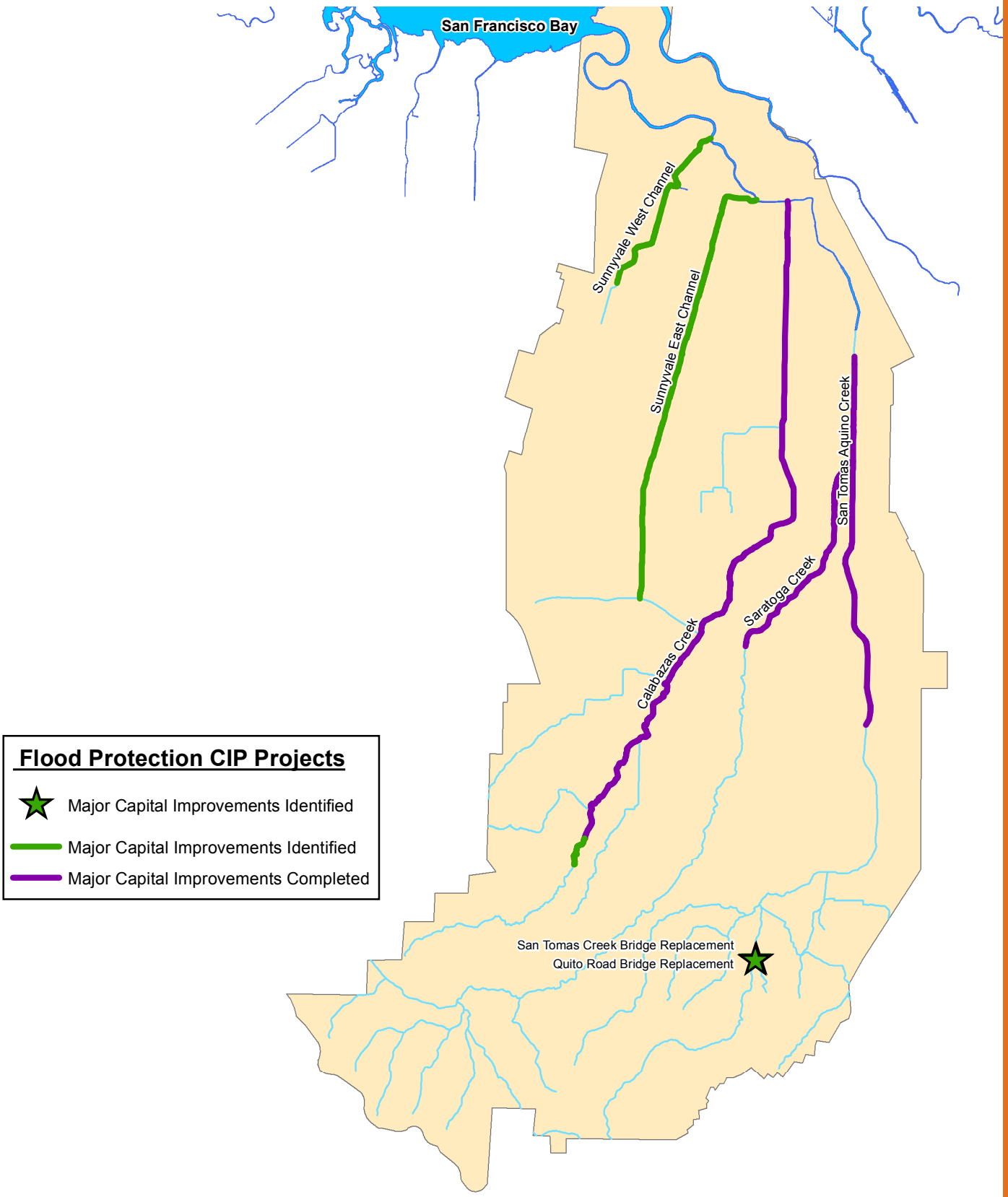
County and Corps participation are for Feasibility Study activities only. Additional funding will be negotiated during subsequent phases.

OPERATING COST IMPACTS

These projects will have an estimated annual operating cost impact of approximately $250,000 beginning in FY24.

USEFUL LIFE: Not Available

West Valley Watershed



Project	**Sunnyvale East and West Channels Flood Protection Project**
Program	Flood Protection – West Valley Watershed
Project No.	26074002
Contact	Heath McMahon hmcmahon@valleywater.org

Sunnyvale West Channel looking upstream from Java Drive

PROJECT DESCRIPTION

In the early stages of the project design process, Valley Water project team decided to join both improvement projects into a single flood protection project with a single Environmental Impact Report to reduce construction costs and minimize construction coordination issues between the two channels.

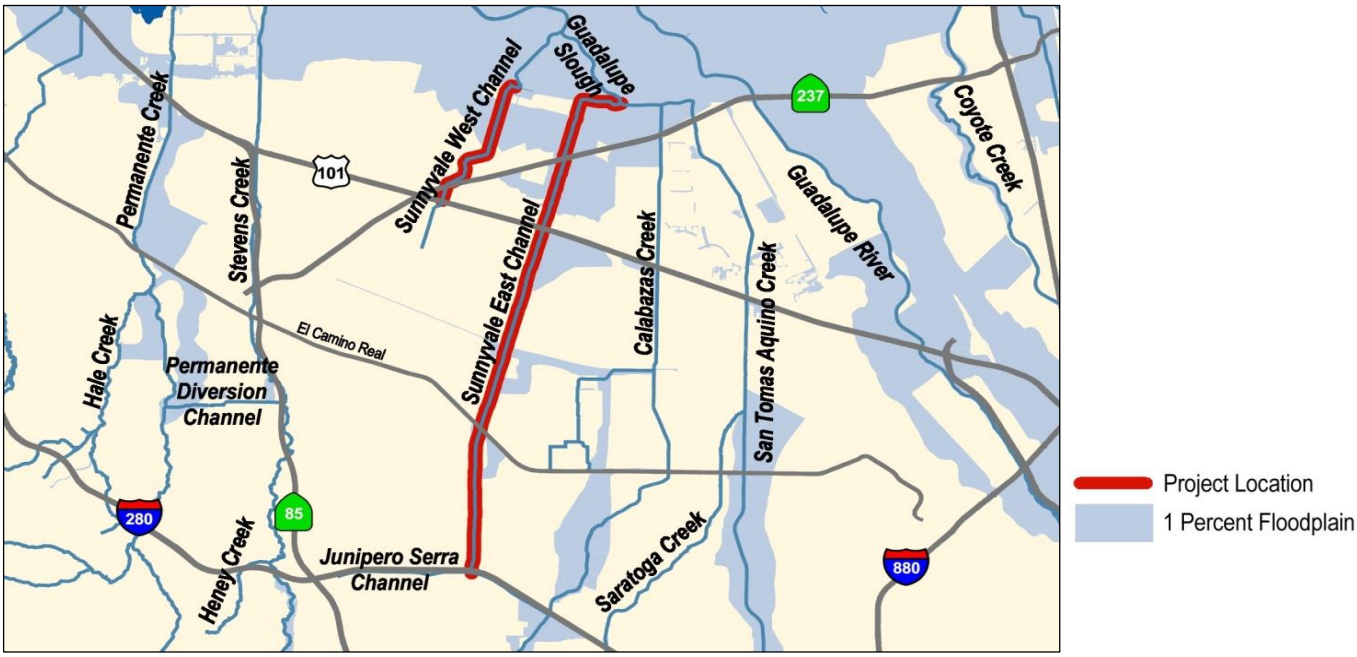
The West Channel extends approximately three miles and upgrades existing channel capacity to provide 1% (or 100-year) riverine flood protection for 47 acres of highly valuable industrial lands. The East Channel extends approximately 6.4 miles and upgrades existing channel capacity to provide 1% riverine flood protection for 1,618 parcels. Both projects decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality.

- Provides 1% flood capacity for approximately 6.5 miles of channel along Sunnyvale East and approximately three miles of channel along Sunnyvale West within the City of Sunnyvale, protecting 1,618 properties (Sunnyvale East) and 47 acres (11 properties) of industrial land (Sunnyvale West).
- Improves stream water quality by providing erosion control measures to decrease sediment and turbidity.
- Identifies opportunities to integrate recreation improvements with the City of Sunnyvale and others as appropriate.

The Sunnyvale East and Sunnyvale West Channels were originally identified as separate projects. In order to improve efficiency by combining efforts, the planning, design and construction phases for both projects will be performed as a single effort.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

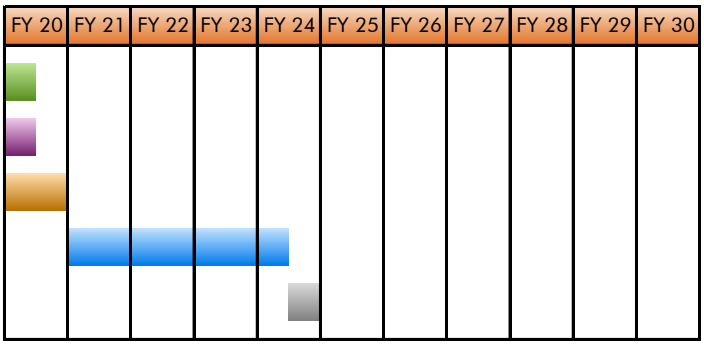
PROJECT LOCATION



SCHEDULE & STATUS

January 2006 to June 2024

Phase	Cost
Plan	5,768
Permits	1,120
Design	11,938
Construct	49,976
Closeout	200
	69,071



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project	18,525	1,500	17,445	17,158	14,043	400	0	0	69,071
with inflation	18,525	1,500	17,445	17,829	14,650	486	0	0	70,435

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
26074002-Sunnyvale East and West Channels Flood Protection Project	30,997	4,441	15,413	2,032	17,829	14,650	486	0	0	70,435

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

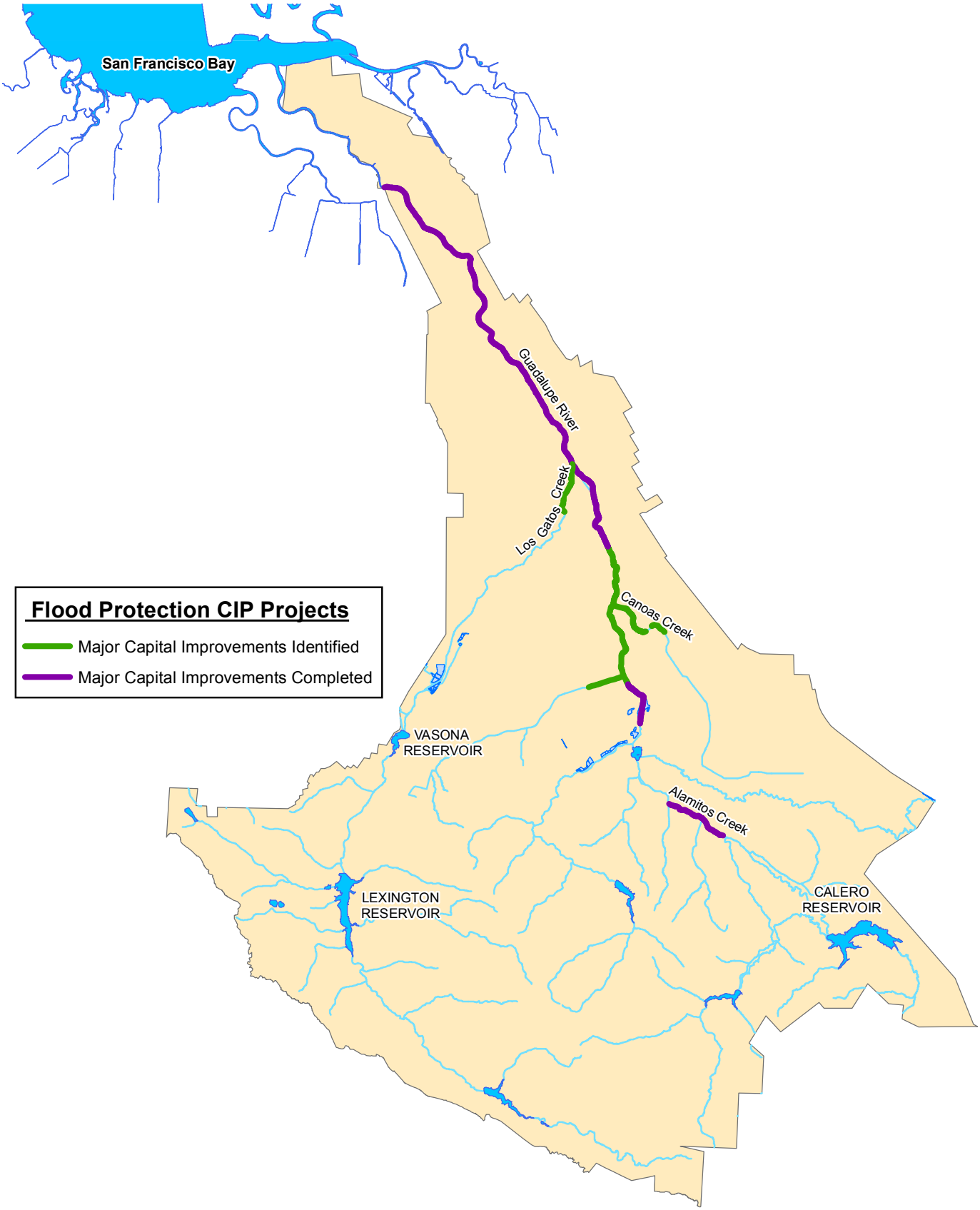
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	70,435
Other Funding Source	0
Total	70,435

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $210,000 per year based on Operations & Maintenance forecasting, beginning in FY24. Increases in operations and maintenance costs include graffiti removal, vegetation management, rodent abatement, good neighbor maintenance, and encampment cleanup in areas where the City of Sunnyvale's joint use agreements are not applicable.

USEFUL LIFE: 30+ Years

Guadalupe Watershed



Project	**Canoas Creek Rodent Damage Repair**
Program	Flood Protection - Guadalupe Watershed
Project No.	30114002
Contact	Ngoc Nguyen nnguyen@valleywater.org

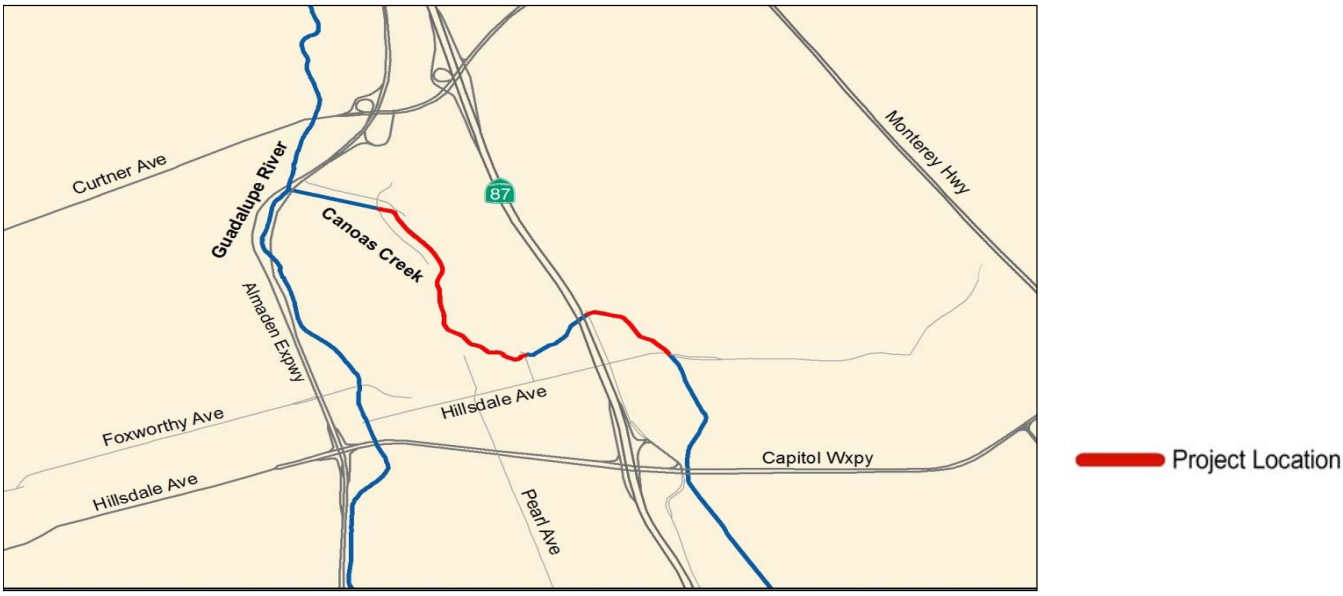
View of damage caused by burrowing animals along Canoas Creek in the Guadalupe Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to Canoas Creek to accomplish the following objectives:

- Repair approximately one mile of damaged creek's levee and embankment.
- Reduce frequent maintenance costs associated with routine bank erosion repair projects.
- Reduce the risk of levee/bank slope failure due to damage caused from burrowing animals.

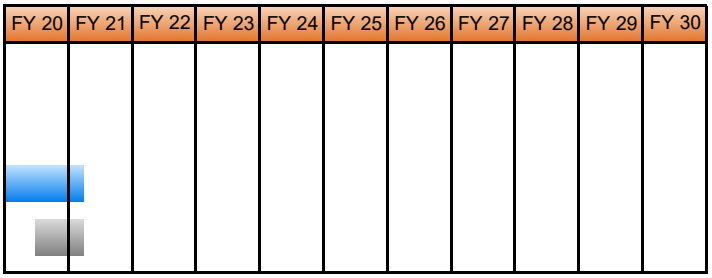
PROJECT LOCATION



SCHEDULE & STATUS

March 2015 to July 2020

Phase	Cost
Plan	33
Design	584
Construct	6,248
Closeout	5
	6,887



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
30114002-Canoas Creek Rodent Damage Repair	6,850	37	0	0	0	0	0	0	6,887
with inflation	6,850	37	0	0	0	0	0	0	6,887

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
30114002-Canoas Creek Rodent Damage Repair	7,307	0	420	0	0	0	0	0	0	7,307

Adjusted Budget includes adopted budget plus approved planned budget adjustments. Funding exceeds planned expenditures by approximately $420,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

Watershed Stream Stewardship	7,307
Other Funding Sources	0
Total	**7,307**

OPERATING COST IMPACTS

Completion of this project is anticipated to increase operating costs by approximately $26,000 per year beginning in FY21.

USEFUL LIFE: 30+ Years

Project	**Guadalupe River Tasman Dr - I-880**
Program	Flood Protection - Guadalupe Watershed
Project No.	30154019
Contact	Vincent Gin vgin@valleywater.org

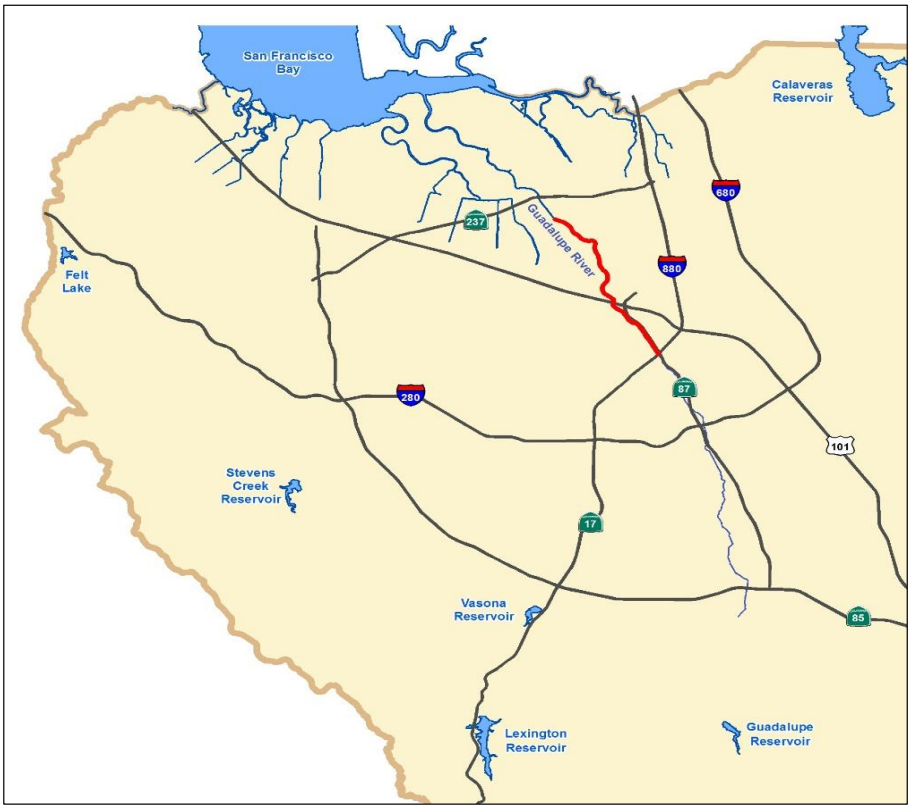
East bank of the Guadalupe River, looking upstream toward Trimble Road

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along the Guadalupe River from Tasman Drive to Interstate 880 to restore the 100-year flood conveyance capacity. The project will accomplish the following objective:

- Restore designed level of service along a portion of the Guadalupe River to provide 1% flood protection.

PROJECT LOCATION

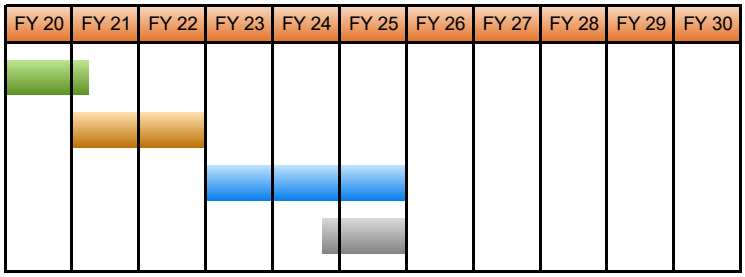


Project Location

SCHEDULE & STATUS

January 2019 to June 2025

Phase	Cost
Plan	2,656
Design	4,972
Construct	79,933
Closeout	50
	87,621



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
30154019-Guadalupe River Tasman Dr - I-880	81	1,000	1,837	2,561	2,159	25,811	27,061	27,111	87,621
with inflation	81	1,000	1,837	2,824	2,499	29,215	30,732	30,892	99,079

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
30154019-Guadalupe River Tasman Dr - I-880	90	1,000	9	1,828	2,824	2,499	29,215	30,732	30,892	99,079

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	99,079
Other Funding Sources	0
Total	**99,079**

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**Guadalupe River–Upper, Interstate 280 to Blossom Hill Road**
Program	Flood Protection – Guadalupe Watershed
Project No.	26154001s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Flooding from Guadalupe River on Willow Street near the Southern Pacific Railroad Bridge

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (USACE) to plan, design, and construct improvements along approximately 6 miles of the Guadalupe River, from Interstate 280 to Blossom Hill Road, to accomplish the following objectives:

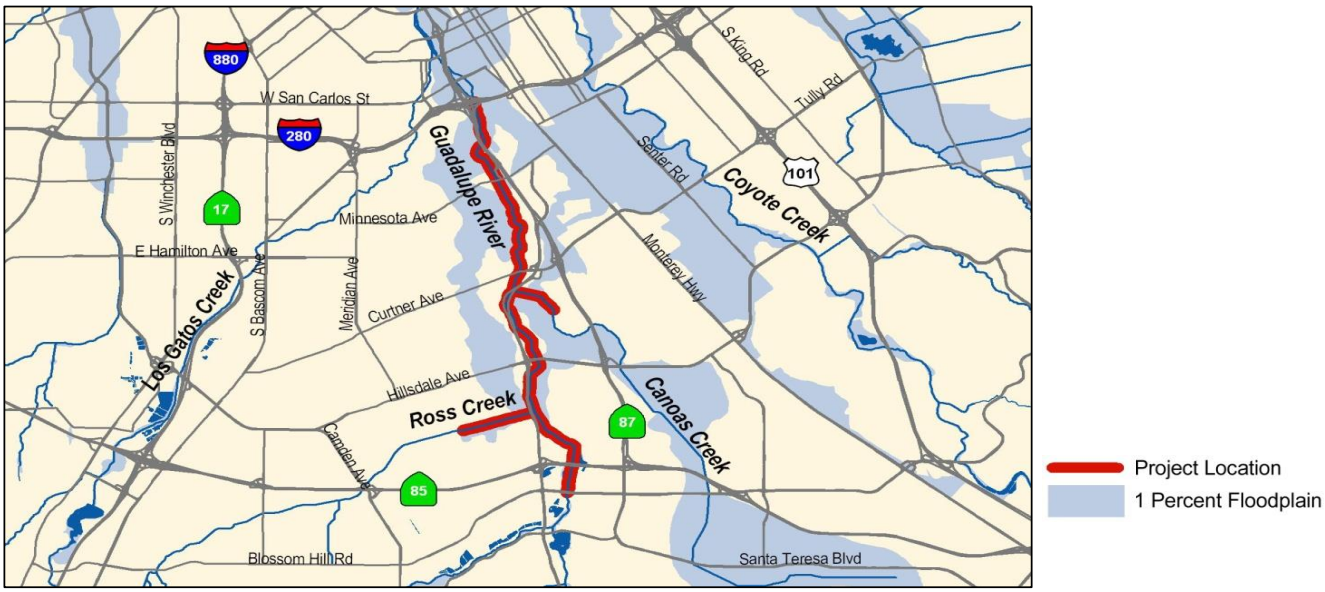
- Provide 1% flood protection to nearly 7,000 parcels along the Guadalupe River, from I-280 to Blossom Hill Road, including portions of Ross Creek and Canoas Creek.
- Provide long-term net gains of 15 acres in riparian forest acreage, quality, and continuity of wildlife habitat, and conditions favoring Chinook salmon and steelhead trout.
- Provide access to an additional 19 miles of suitable upstream spawning and rearing habitat, which would result in significant long-term beneficial impacts on fisheries resources.
- Coordinate with the City of San Jose and the community to establish a continuous maintenance road suitable for trail development between Interstate 280 and Los Alamitos Creek.
- Improve water quality by reducing bank erosion and sedimentation-related impacts along the river and tributaries.
- Address and resolve permit coordination activities and watershed integration issues through the Guadalupe Watershed Integration Working Group.

This project is accounted for in the following:

- 26154001 Fish Passage Modification (Completed)
- 26154002 I-280 to Southern Pacific Railroad Bridge (Reach 6)
- 26154003 Southern Pacific Railroad Bridge to Blossom Hill Road (Reaches 7-12)

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project E8. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

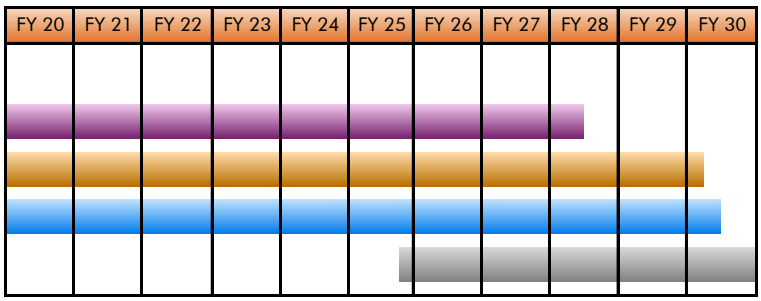


SCHEDULE & STATUS

September 1985 to June 2030

Planning phase is complete. Design and construction of eight individual reaches are being done sequentially.

Phase	Cost
Plan	9,107
Permits	2,675
Design	76,751
Construct	73,229
Closeout	166
	165,908



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	2,651
with inflation	2,651	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	33,095	410	105	1,600	30	30	30	2,275	37,575
with inflation	33,095	410	105	1,722	35	36	38	3,149	38,591
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	65,495	730	9,030	23,790	16,850	1,900	0	0	117,795
with inflation	65,495	730	9,030	25,667	18,056	2,309	0	0	121,287
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	7,887
with inflation	7,887	0	0	0	0	0	0	0	7,887
TOTAL	**109,128**	**1,140**	**9,135**	**25,390**	**16,880**	**1,930**	**30**	**2,275**	**165,908**
with inflation	**109,128**	**1,140**	**9,135**	**27,389**	**18,090**	**2,346**	**38**	**3,149**	**170,416**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
26154001-Guadalupe Rv—Upr, Fish Passage Mods	2,651	0	0	0	0	0	0	0	0	2,651
26154002-Guadalupe Rv—Upr, I-280 to SPRR (R6)	34,619	86	1,200	0	627	35	36	38	3,149	38,591
26154003-Guadalupe Rv—Upper, SPRR to Blossom Hill Rd. (R7-12)	89,399	0	23,174	0	11,523	18,056	2,309	0	0	121,287
Actuals in closed project numbers	7,887	0	0	0	0	0	0	0	0	7,887
TOTAL	**134,556**	**86**	**24,374**	**0**	**12,150**	**18,090**	**2,346**	**38**	**3,149**	**170,416**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

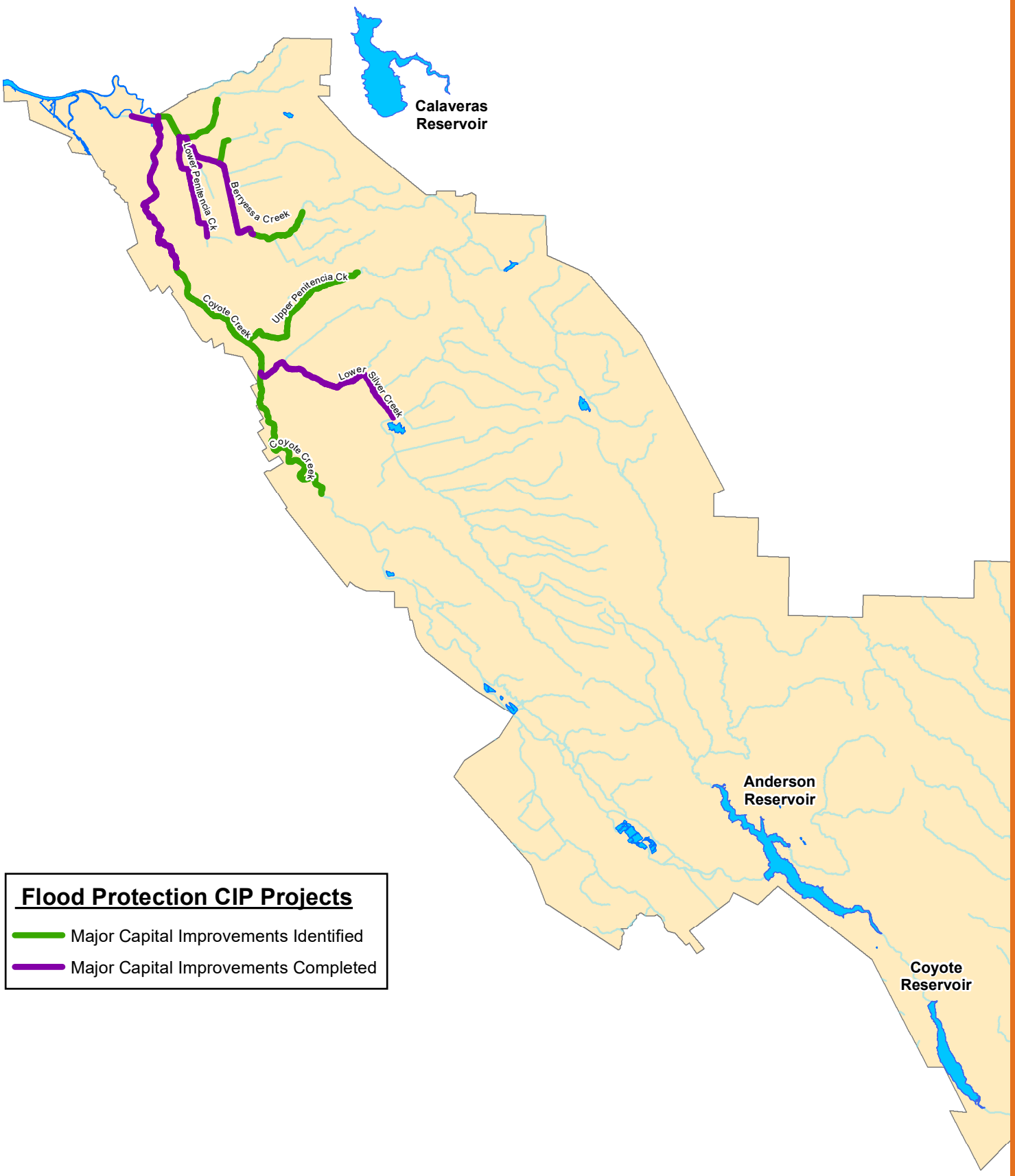
SCVWD Watershed Stream Stewardship Fund	12,000
SCVWD Safe, Clean Water and Natural Flood Protection	124,648
State of California	29,177
City of San Jose	4,591
Total	**170,416**
USACE - In-kind Services	188,000

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $360,000 per year, beginning in FY20, for mitigation and monitoring labor and equipment, implementation of adaptive management measures, and operations and maintenance in accordance with the USACE Operations and Maintenance Manual.

USEFUL LIFE: 30+ Years

Coyote Watershed



Flood Protection CIP Projects

- Major Capital Improvements Identified
- Major Capital Improvements Completed

Project	**Berryessa Creek, Calaveras Boulevard to Interstate 680**
Program	Flood Protection – Coyote Watershed
Project No.	26174041s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Berryessa Creek near flood stage at Piedmont Road in San Jose

PROJECT DESCRIPTION

This project partners with the U.S. Army Corps of Engineers (USACE) to plan, design, and construct improvements along approximately two miles of Berryessa Creek, from Calaveras Boulevard to Interstate 680, to accomplish the following objectives:

- Provide 1% flood protection to more than 1,100 homes, businesses, and public buildings.
- Reduce sedimentation and maintenance requirements.
- Mitigate for project impacts.
- Improve stream habitat values.
- Coordinate with the cities of San Jose and Milpitas, and the community to establish a continuous maintenance road suitable for trail development along the Berryessa Creek project.
- Obtain a Letter of Map Revision from the Federal Emergency Management Agency.
- Incorporate Valley Water's Clean, Safe Creeks and Natural Flood Protection Program Objectives.

This project is accounted for in the following:

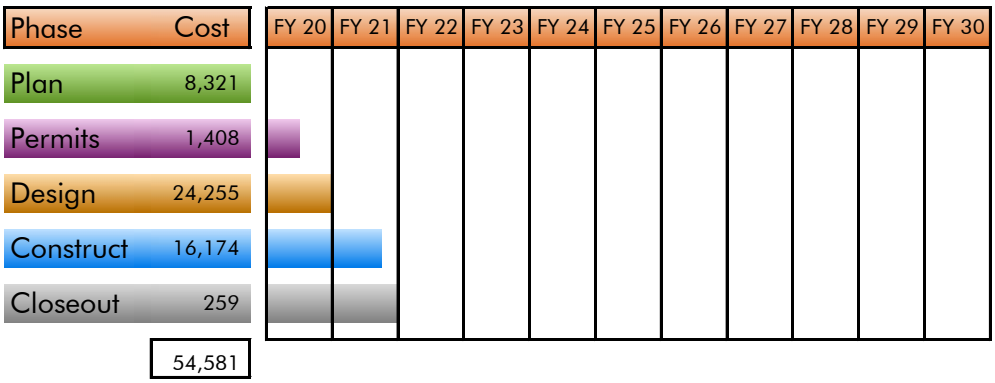
26174041 – Coordination with USACE
26174042 – Reimbursable work – Lands, Easements, Rights of Way, Relocations and Disposal

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

January 2000 to June 2021



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
26174041-Berryessa Creek, USACE Coordination	22,443	13,100	50	0	0	0	0	0	35,593
with inflation	22,443	13,100	50	0	0	0	0	0	35,593
26174042-Berryessa Creek, LERRDs	17,462	1,526	0	0	0	0	0	0	18,988
with inflation	17,462	1,526	0	0	0	0	0	0	18,988
TOTAL	**39,905**	**14,626**	**50**	**0**	**0**	**0**	**0**	**0**	**54,581**
with inflation	**39,905**	**14,626**	**50**	**0**	**0**	**0**	**0**	**0**	**54,581**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
26174041-Berryessa Creek, USACE Coordination	35,566	0	23	27	0	0	0	0	0	35,593
26174042-Berryessa Creek, LERRDs	18,986	2	0	0	0	0	0	0	0	18,988
TOTAL	**54,552**	**2**	**23**	**27**	**0**	**0**	**0**	**0**	**0**	**54,581**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	18,981
State of California	25,600
Department of Water Resources (Prop 1E)	10,000
Total	**54,581**
USACE - In-kind Services	13,600

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $100,000 per year, beginning in FY20, to maintain approximately two miles of new levees and flood walls, and for activities such as vegetation control and graffiti removal.

USEFUL LIFE: 30+ Years

Project	**Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard**
Program	Flood Protection – Coyote Watershed
Project No.	40174004s
Contact	Ngoc Nguyen nnguyen@valleywater.org

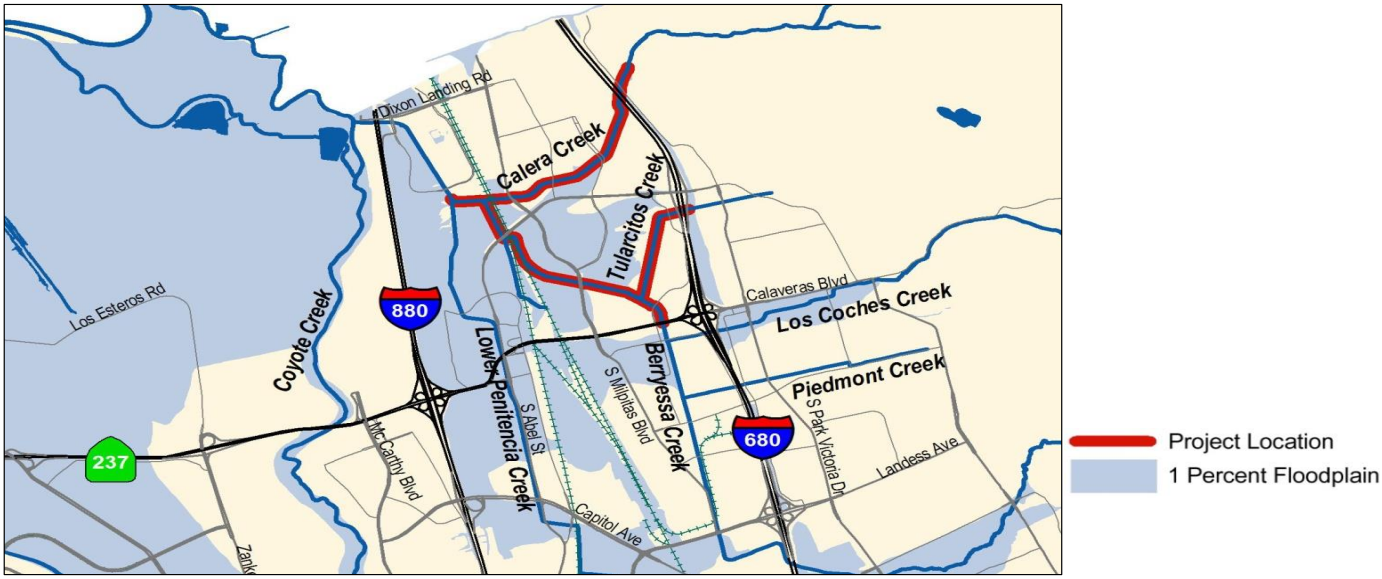
Berryessa Creek upstream of the confluence with Lower Penitencia Creek

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately three miles of Berryessa Creek and its tributaries, from the confluence with Lower Penitencia Creek to Calaveras Boulevard (Phase 1 and 2) and both Calera and Tularcitos Creeks (Phase 3), to accomplish the following objectives:

- Provide 1% flood protection to 1,823 homes, businesses, and public buildings in the surrounding area.
- Improve the structural integrity of the levees.
- Improve maintenance access and safety for Valley Water staff.
- Identify opportunities to integrate recreation inputs consistent with the City of Milpitas' Trail Master Plan.
- Obtain a letter of map revision from the Federal Emergency Management Agency.

PROJECT LOCATION

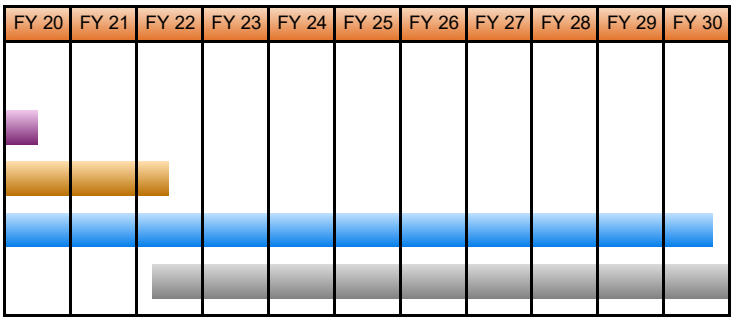


SCHEDULE & STATUS

March 2001 to June 2030

Planning phase is complete. Construction includes three phases and three years of plant establishment monitoring.

Phase	Cost
Plan	8,199
Permits	2,196
Design	15,145
Construct	135,163
Closeout	69
	164,222



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	46,724	105	105	100	0	0	0	0	47,034
with inflation	46,724	105	105	110	0	0	0	0	47,044
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	58,214	2,320	1,586	837	140	0	0	0	63,097
with inflation	58,214	2,320	1,586	923	162	0	0	0	63,205
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	0	0	0	0	54,091	54,091
with inflation	0	0	0	0	0	0	0	71,236	71,236
TOTAL	**104,938**	**2,425**	**1,691**	**937**	**140**	**0**	**0**	**54,091**	**164,222**
with inflation	**104,938**	**2,425**	**1,691**	**1,033**	**162**	**0**	**0**	**71,236**	**181,485**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40174004-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 1	50,191	0	3,362	0	0	0	0	0	0	50,191
40174005-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 2	62,075	0	1,541	45	923	162	0	0	0	63,205
40C40397-Berryessa Creek, Lower Penitencia Creek to Calaveras Boulevard Phase 3	0	0	0	0	0	0	0	0	71,236	71,236
TOTAL	**112,266**	**0**	**4,903**	**45**	**923**	**162**	**0**	**0**	**71,236**	**184,632**

Adjusted Budget includes adopted budget plus approved budget adjustments. Allocated funding exceeds planned expenditures by approximately $3,147,000. Excess funds will be returned to Fund Reserves at the close of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	169,618
Department of Water Resources (Prop 1E)	15,014
Total	**184,632**

OPERATING COST IMPACTS

The operating cost impacts of these projects are anticipated to average approximately $210,000 annually starting in FY20.

USEFUL LIFE: 30+ Years

Project	**Coyote Creek, Montague Expressway to Tully Road**
Program	Flood Protection – Coyote Watershed
Project No.	26174043
Contact	Ngoc Nguyen nnguyen@valleywater.org

February 2017 flood event, on Rock Springs Drive looking northeast towards Rocksprings Park

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately nine miles of Coyote Creek, from Montague Expressway to Tully Road, to accomplish the following objectives:

- To reduce the risk of flooding to homes, schools, businesses, and highways from approximately a 20 year flood event (February 2017 event), from Montague Expressway to Tully Road.
- Improve water quality, enhance stream habitat, and provide recreational opportunities.
- Incorporate aesthetic elements of the Coyote Creek park chain.
- Minimize long-term maintenance needs.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW). For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

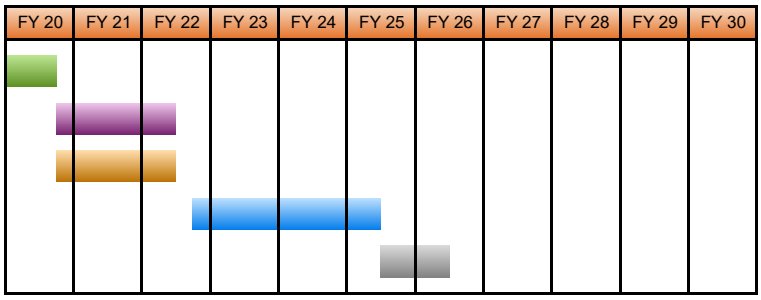
PROJECT LOCATION

Project Location

SCHEDULE & STATUS

November 2017 to December 2025

Phase	Cost
Plan	8,805
Permits	516
Design	7,757
Construct	42,173
Closeout	206
	59,906



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26174043-Coyote Creek, Montague Expressway to Tully Road	12,984	1,041	3,211	6,505	18,750	16,090	1,325	0	59,906
with inflation	12,984	1,041	3,211	7,100	21,186	19,117	1,691	0	66,330

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26174043-Coyote Creek, Montague Expressway to Tully Road	14,098	941	1,014	2,197	7,100	21,186	19,117	1,691	0	66,330

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	66,330
Other Funding Source	0
Total	**66,330**

OPERATING COST IMPACTS

Currently Valley Water has limited and sporadic property rights within the project limits along the creek, and ongoing maintenance costs are relatively small. Project implementation may include acquisition of continuous right of way for construction and future operations and maintenance. This project is expected to increase operating costs by approximately $1,000,000 per year starting in FY25.

USEFUL LIFE: 30+ Years

Project	**Cunningham Flood Detention Certification**
Program	Flood Protection – Coyote Watershed
Project No.	40264011
Contact	Ngoc Nguyen nnguyen@valleywater.org

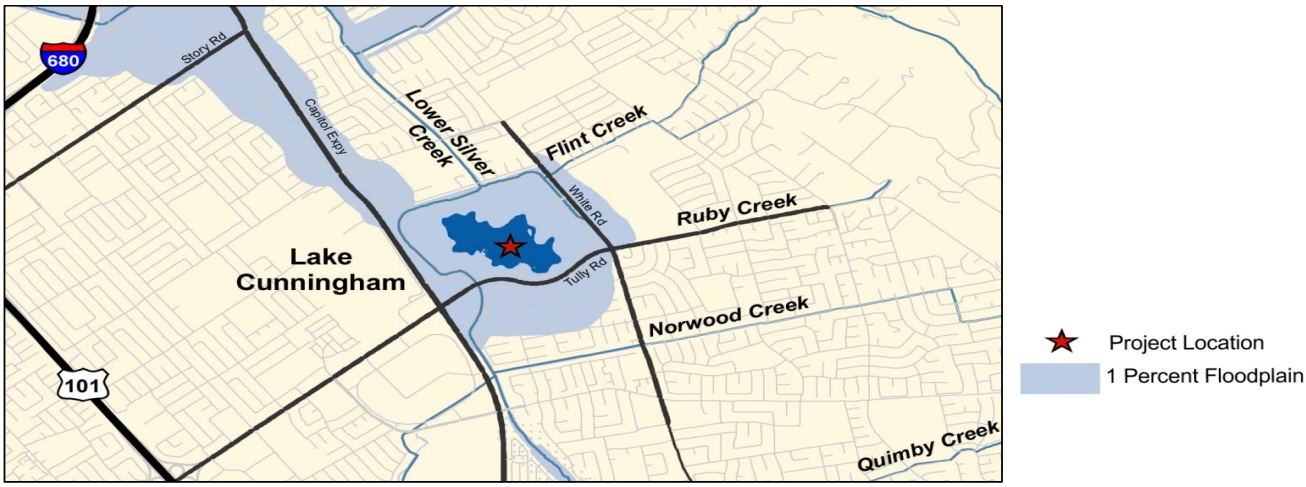
Flooding from Lower Silver Creek in February 1969 at the future site of Lake Cunningham Regional Park

PROJECT DESCRIPTION

This project plans, designs, and constructs final improvements at Lake Cunningham Regional Park (Park) to ensure the site operates as a flood detention facility in accordance with the 1978 agreement with the City of San Jose (City) and to ensure the Lower Silver Creek Project improvements downstream of Cunningham Avenue function as designed. This project will accomplish the following objectives:

- Validate that the flood detention facility can attenuate the volume of water associated with 2,249 cfs below the Park land elevation as stipulated in the 1978 Joint Use Agreement between the City and Valley Water.
- Obtain Federal Emergency Management Agency certification of the flood detention facility and Lower Silver Creek improvements north of the Park to revise the applicable flood insurance rate maps in the Lower Silver Creek 1% floodplain near the north of the Park.
- Update the 1978 Joint Use Agreement between the City and Valley Water to meet the flood detention facility's validated condition.

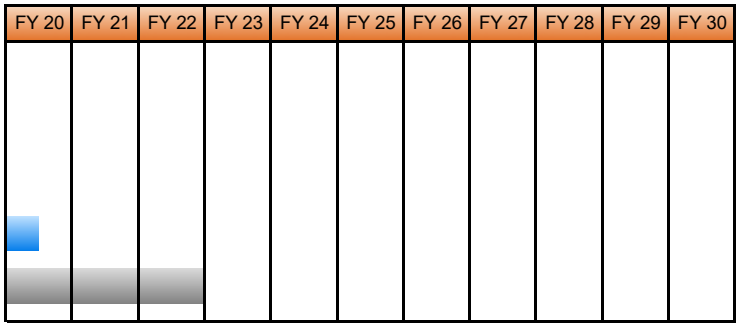
PROJECT LOCATION



SCHEDULE & STATUS

August 1999 to June 2022

Phase	Cost
Plan	2,323
Permits	366
Design	2,278
Construct	6,435
Closeout	17
	11,839



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40264011-Cunningham Flood Detention Certification	11,010	767	32	30	0	0	0	0	11,839
with inflation	11,010	767	32	33	0	0	0	0	11,842

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40264011-Cunningham Flood Detention Certification	11,251	556	30	2	33	0	0	0	0	11,842

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	6,542
California Department of Water Resources	1,000
Natural Resource Conservation Service	4,300
Total	**11,842**

OPERATING COST IMPACTS

The project is within Valley Water jurisdiction and it is designed to minimize maintenance activities such as sediment removal. Operating costs are expected to be approximately $60,000 per year starting in FY20.

USEFUL LIFE: 30+ Years

Project	**Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks**
Program	Flood Protection – Coyote Watershed
Project No.	40334005
Contact	Ngoc Nguyen nnguyen@valleywater.org

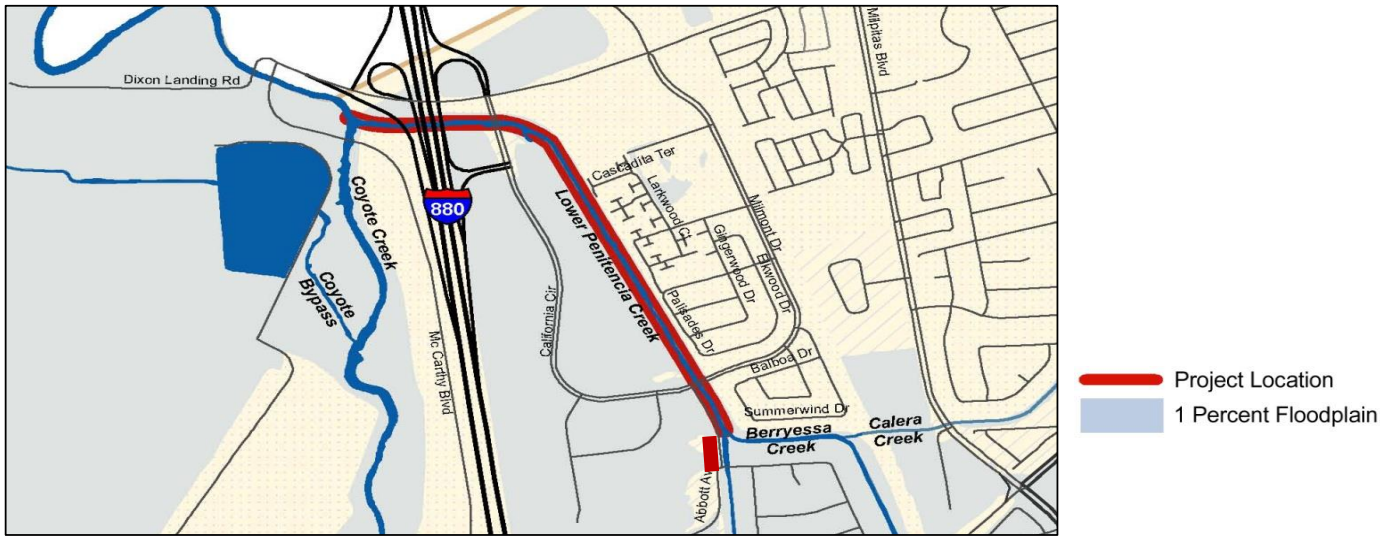
Lower Penitencia Creek, looking downstream from Milmont Drive

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements along approximately one mile of Lower Penitencia Creek from the downstream confluence with Coyote Creek to the upstream face of San Andreas Drive, to accomplish the following objectives:

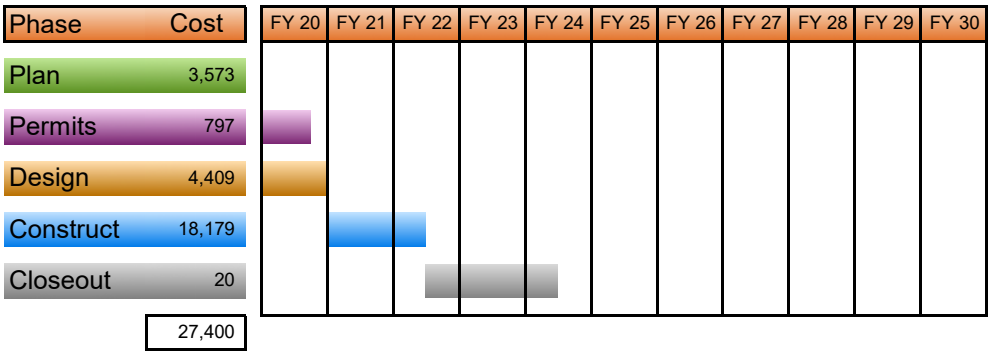
- Convey the Lower Berryessa Creek one-percent design flow.
- Meet required water surface elevations at Coyote Creek and Berryessa Creek confluences.
- Minimize the need for seasonal removal of sediment and non-woody vegetation.
- Maintain existing Federal Emergency Management Agency (FEMA) accreditation along the east levee located between California Circle and Berryessa Creek.
- Enable FEMA certification of the improvements.

PROJECT LOCATION



SCHEDULE & STATUS

October 2010 to December 2023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	8,804	1,445	8,781	7,550	550	270	0	0	27,400
with inflation	8,804	1,445	8,781	7,817	637	328	0	0	27,812

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40334005-Lower Penitencia Creek Improvements, Berryessa to Coyote Creeks	9,297	1,990	1,038	7,743	7,817	637	328	0	0	27,812

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	22,812
Department of Water Resources (Prop 1E)	5,000
Total	**27,812**

OPERATING COST IMPACTS

This project is expected to have an operating cost of approximately $215,000 per year, beginning in FY22.

USEFUL LIFE: 50 Years

Project	**Lower Silver Creek, I-680 to Cunningham Avenue (R4-6) Flood Protection Project**
Program	Flood Protection – Coyote Watershed
Project No.	40264008s
Contact	Heath McMahon hmcmahon@valleywater.org

Lower Silver Creek looking upstream from Capital Expressway

PROJECT DESCRIPTION

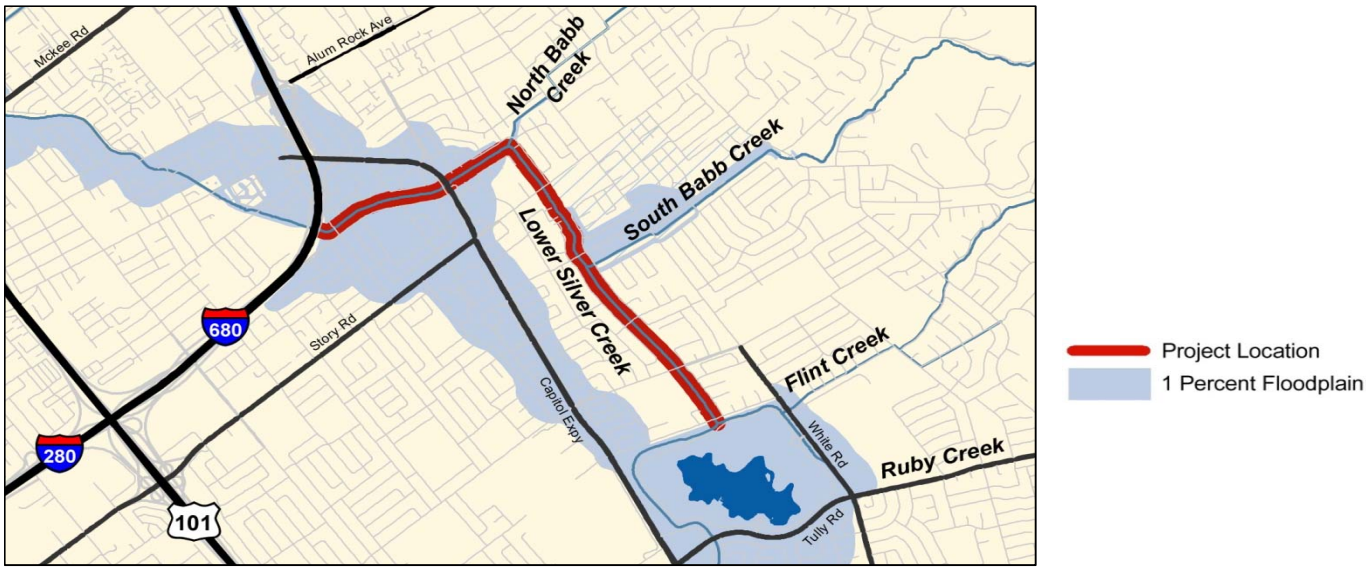
This project is part of a flood control project that partners with the Natural Resource Conservation Service to plan, design and construct improvements along approximately 2.3 miles of Lower Silver Creek, from Interstate 680 to Lake Cunningham. This project includes elements that are eligible for reimbursement from the state and federal governments to accomplish the following objectives:

- Increase flood protection to 3,800 parcels in the surrounding area.
- Allow for on-site mitigation of project impacts, and in some cases enhancement of existing habitat values by increased wetlands and riparian habitat.
- Improve vehicle and pedestrian bridges crossing Lower Silver Creek.
- Develop with the City of San Jose the footprint for a future trail project between Capitol Avenue-Frontage Road and Jackson Avenue that ensures pedestrians and bicyclists may travel beneath the Dobern Pedestrian Bridge.

This project is accounted for in the following:

- 40264007 Lower Silver Creek, I-680 to N. Babb Creek (Reach 4 Planning) - Completed
- 40264008 Lower Silver Creek, I-680 to Cunningham Rd. (Reaches 4-6)
- 40264012 Lower Silver Creek (Reaches 4-6) Reimbursable

PROJECT LOCATION

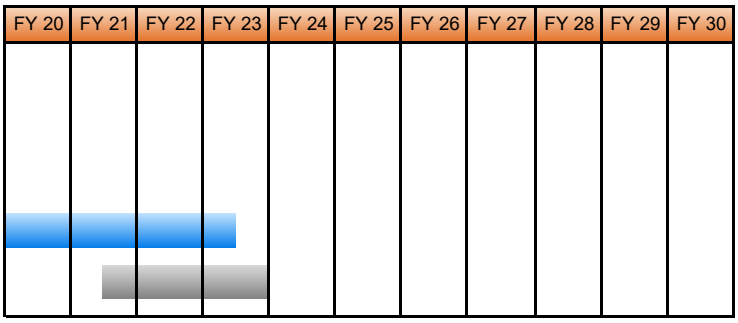


SCHEDULE & STATUS

August 2008 to June 2023

Planning and Design phases are complete

Phase	Cost
Plan	6,308
Permits	212
Design	10,923
Construct	81,247
Closeout	91
	101,834



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	2,371
with inflation	2,371	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	95,073	1,934	167	50	50	0	0	0	97,274
with inflation	95,073	1,934	167	55	58	0	0	0	97,287
40264012-Lower Silver Creek, LERRDs (R4-6)	1,897	250	42	0	0	0	0	0	2,189
with inflation	1,897	250	42	0	0	0	0	0	2,189
TOTAL	99,341	2,184	209	50	50	0	0	0	101,834
with inflation	99,341	2,184	209	55	58	0	0	0	101,847

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
40264007-Lower Silver Creek, Reach 4 Planning	2,371	0	0	0	0	0	0	0	0	2,371
40264008-Lower Silver Ck, Nonreimbursable (R4-6)	96,266	741	0	167	55	58	0	0	0	97,287
40264012-Lower Silver Creek, LERRDs (R4-6)	2,912	0	765	0	0	0	0	0	0	2,912
TOTAL	101,549	741	765	167	55	58	0	0	0	102,570

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $723,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	49,480
State of California	8,414
Natural Resource Conservation Service - ARRA	20,676
California Department of Water Resources	24,000
Total	**102,570**

OPERATING COST IMPACTS

The operating cost impacts are estimated to be $230,000 per year beginning in FY20. Projected operating and maintenance costs include sediment removal, vegetation management, bank protection, graffiti removal, and encampment cleanup.

USEFUL LIFE: 50+ Years

Project	**Upper Penitencia Creek, Coyote Creek to Dorel Drive**
Program	Flood Protection – Coyote Watershed
Project No.	40324003s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Flooding at King Road on Upper Penitencia Creek

PROJECT DESCRIPTION

Initially, this project partnered with the U.S. Army Corps of Engineers (USACE) to plan, design, and construct improvements along approximately 4.2 miles of Upper Penitencia Creek, from the confluence with Coyote Creek to Dorel Drive, to accomplish the objectives listed below. In 2016, the USACE's decided that the multi-objective project which is appropriate for this creek could not be funded under the existing single-purpose authorization. The Project was not included in the USACE's 2017 workplan.

Objectives:

- Provide 1% flood protection to more than 5,000 homes, businesses, and public buildings.
- Improve stream habitat values and fisheries potential.
- Reduce sedimentation and maintenance requirements.
- Identify opportunities to integrate recreation improvements consistent with the City of San Jose's Master Plans, the County's Penitencia Creek Master Plan, and Santa Clara Countywide Trails Master Plan.
- Incorporate Valley Water's Safe, Clean Water and Natural Flood Protection Program objectives.

This project is accounted for in the following:

- 40324003 Initial stages of Planning Phase through FY18
- 26324001 Safe Clean Water Program

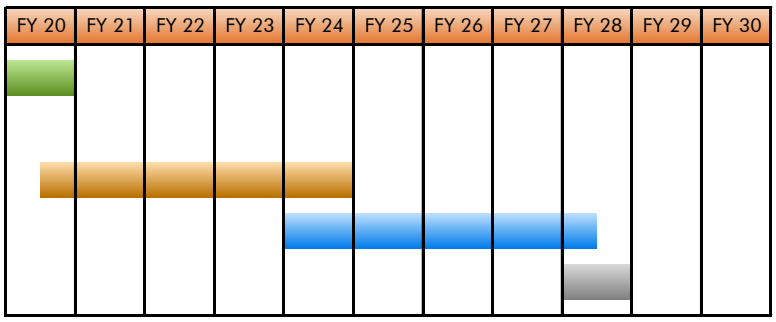
This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project E4. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

July 2000 to June 2028

Phase	Cost
Plan	6,795
Permits	1,709
Design	10,258
Construct	14,028
Closeout	154
	33,259



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	9,467	10	0	0	0	0	0	0	9,477
with inflation	9,467	10	0	0	0	0	0	0	9,477
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	2,305	10	0	0	0	0	0	0	2,315
with inflation	2,305	10	0	0	0	0	0	0	2,315
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	649	1,305	2,642	2,516	200	1,811	1,341	11,003	21,467
with inflation	649	1,305	2,642	2,774	232	2,201	1,711	13,485	24,999
TOTAL	**12,421**	**1,325**	**2,642**	**2,516**	**200**	**1,811**	**1,341**	**11,003**	**33,259**
with inflation	**12,421**	**1,325**	**2,642**	**2,774**	**232**	**2,201**	**1,711**	**13,485**	**36,791**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
40324003-Upper Penitencia Ck, Coyote Ck to Dorel Dr, Corps	8,970	507	0	0	0	0	0	0	0	9,477
40324005-Upper Penitencia Ck, Coyote Ck to Dorel Dr, LERRDs	2,315	0	0	0	0	0	0	0	0	2,315
26324001-Upper Penitencia Ck, Coyote Ck to Dorel Dr	1,910	1,305	1,261	1,381	2,774	232	2,201	1,711	13,485	24,999
TOTAL	**13,195**	**1,812**	**1,261**	**1,381**	**2,774**	**232**	**2,201**	**1,711**	**13,485**	**36,791**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

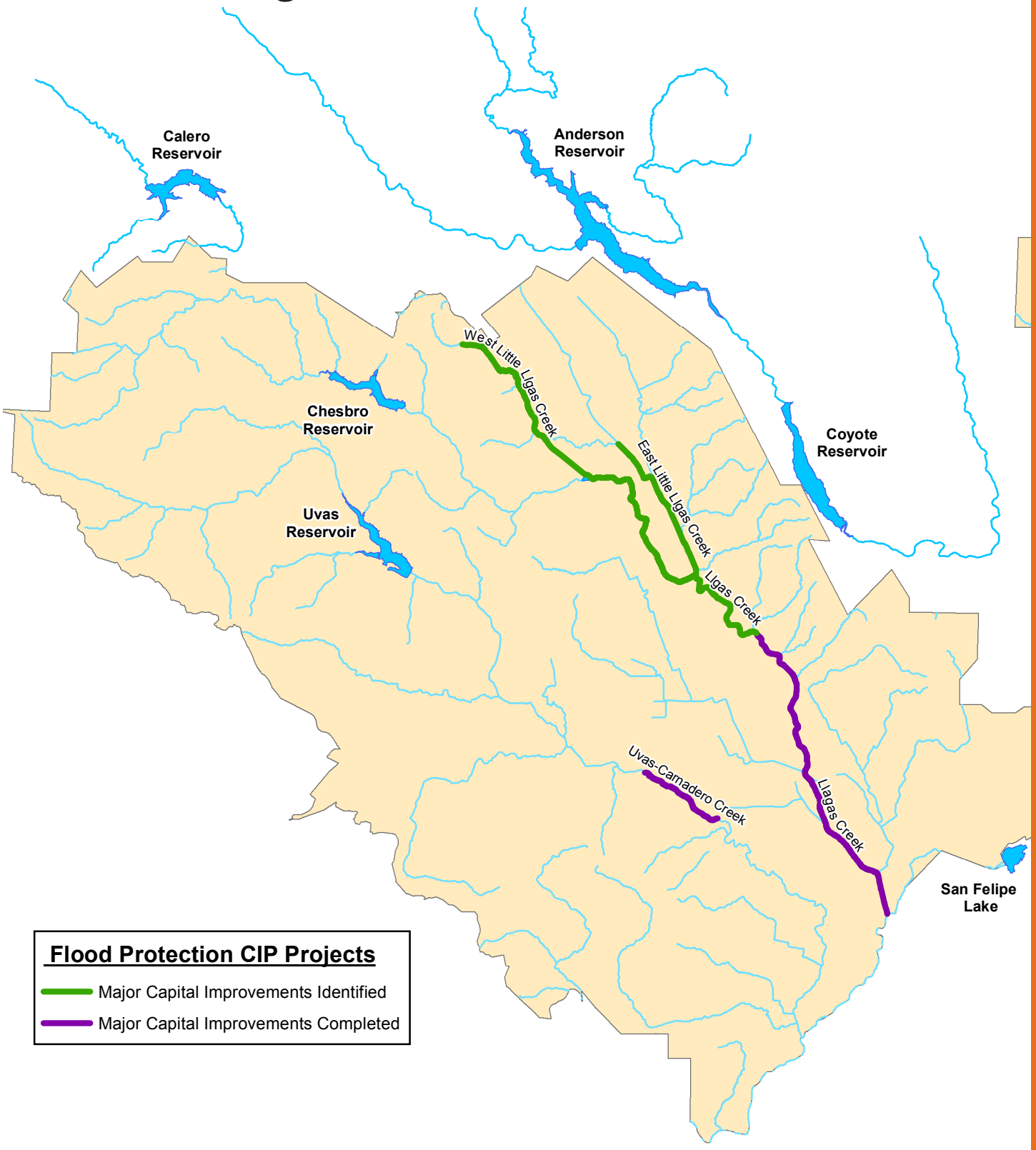
SCVWD Watershed Stream Stewardship Fund	11,792
SCVWD Safe, Clean Water Fund	24,999
Total	**36,791**
USACE - In-kind Services	102,720

OPERATING COST IMPACTS

Operating costs are expected to average $790,000 per year beginning in FY25.

USEFUL LIFE: Not Available

Uvas/Llagas Watersheds



Project	**Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River**
Program	Flood Protection – Uvas/Llagas Watershed
Project No.	50284010
Contact	Heath McMahon hmcmahon@valleywater.org

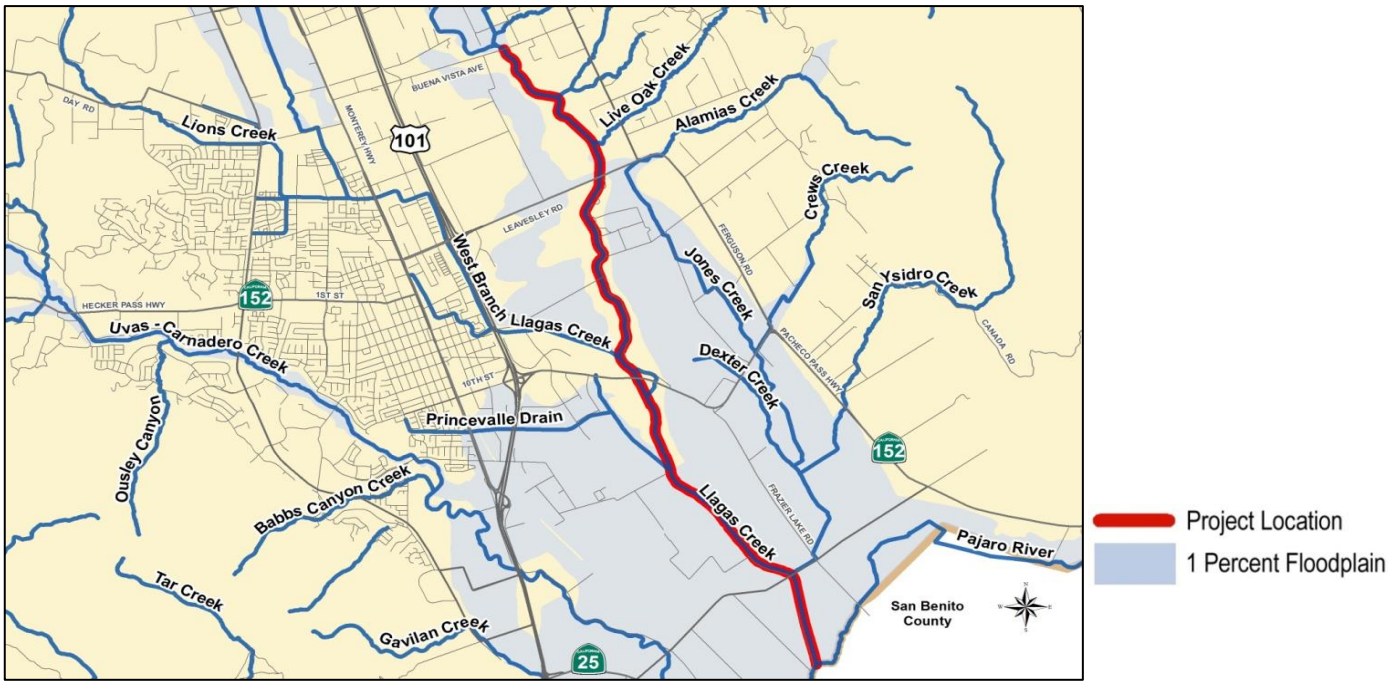
Lower Llagas Creek near Pajaro River

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements on 7.15 miles of Lower Llagas Creek, from Buena Vista Avenue to Pajaro River, to accomplish the following objectives:

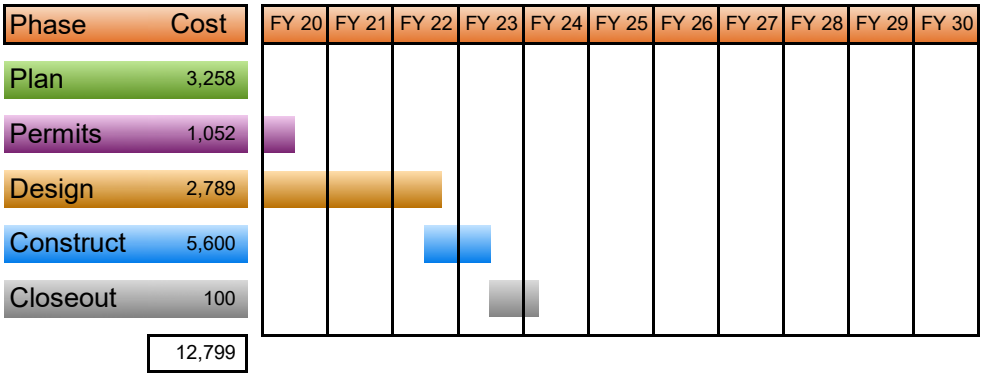
- Evaluate the current flood risk in the area surrounding the project versus the design level flood risk.
- Develop options to provide flood protection for Lower Llagas Creek Reaches 2 and 3 in accordance with Federal Emergency Management Agency criteria where applicable.
- Identify feasible opportunities for environmental restoration and corridor preservation.
- Coordinate planning, design, and construction efforts with the South County Regional Wastewater Authority.

PROJECT LOCATION



SCHEDULE & STATUS

September 2008 to July 2023



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	3,323	815	861	1,350	3,450	3,000	0	0	12,799
with inflation	3,323	815	861	1,488	3,864	3,401	0	0	13,752

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
50284010-Llagas Creek–Lower, Capacity Restoration, Buena Vista Avenue to Pajaro River	6,947	0	2,809	0	0	3,404	3,401	0	0	13,752

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	12,632
State of California	1,120
Total	**13,752**

OPERATING COST IMPACTS

Operating cost impacts will determined at the completion of the design phase.

USEFUL LIFE: 30+ Years

Project	**Llagas Creek–Upper, Buena Vista Avenue to Llagas Road**
Program	Flood Protection – Uvas/Llagas Watershed
Project No.	26174051s
Contact	Heath McMahon hmcmahon@valleywater.org

Llagas Creek floods at Watsonville Road and the surrounding area

PROJECT DESCRIPTION

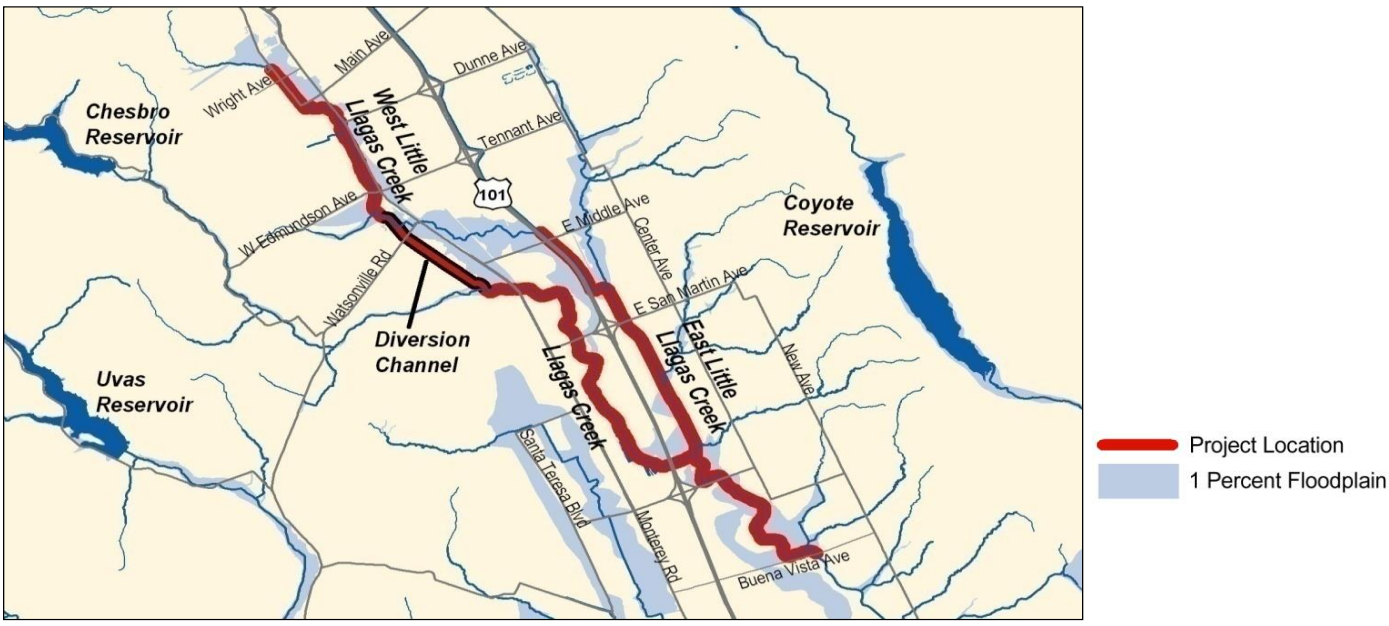
This project continues a Clean, Safe Creeks project in partnership with the U.S. Army Corps of Engineers (USACE) and the state to plan, design, and construct improvements along 13.9 miles of channel. The project extends from Buena Vista Avenue to Llagas Road, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized preferred project protects the urban area of Morgan Hill from a 1% (or 100-year) flood, and reduces the frequency of flooding in surrounding areas. Construction includes channel modifications and replacement of road crossings. Valley Water continues to work with Congress to aggressively pursue federal funds to bring this project to full fruition. In 2012, project limits were extended 2,700 feet upstream to Llagas Road to address public concerns.

This project is accounted for in the following:

- 26174051 - Reaches 4-8 & 14 - Reimbursable - Lands, Easements, Rights of Way, Relocation, & Disposal
- 26174052 - Reaches 4-8 & 14 - Construction/Coordination with USACE
- 26174053 - Technical Studies (completed)
- 26174054 - Design
- 50C40335 - Construction, Reach 5, 6, & 7b

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project E6. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

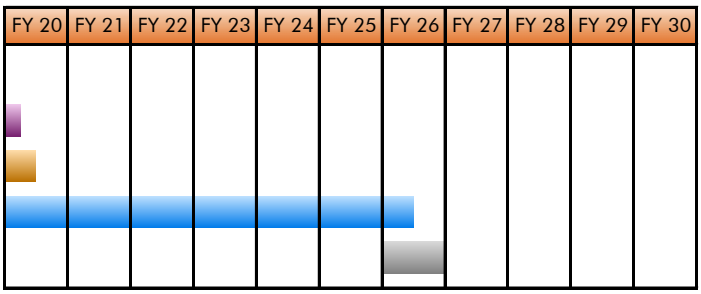


SCHEDULE & STATUS

July 2000 to June 2026

Project schedule may vary considerably and is dependent upon the USACE and Congress.

Phase	Cost
Plan	3,729
Permits	5,955
Design	64,953
Construction	197,892
Closeout	600
	279,284



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
26174051-Llagas Ck—Upper, LERRDs	39,784	5,255	0	0	0	0	0	0	45,039
with inflation	39,784	5,255	0	0	0	0	0	0	45,039
26174052-Llagas Ck—Upper, USACE Coordination	11,024	40,042	46,273	46,690	45,250	11,400	3,050	250	203,979
with inflation	11,024	40,042	46,273	48,576	47,278	11,816	3,277	332	208,617
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	1,446
with inflation	1,446	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	21,775	1,000	945	900	1,050	1,050	1,150	950	28,820
with inflation	21,775	1,000	945	992	1,216	1,276	1,468	1,261	29,933
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	17,510	6,180	0	0	0	0	0	23,690
with inflation	0	17,510	6,180	0	0	0	0	0	23,690
TOTAL	**74,029**	**63,807**	**53,398**	**47,590**	**46,300**	**12,450**	**4,200**	**1,200**	**279,284**
with inflation	**74,029**	**63,807**	**53,398**	**49,568**	**48,493**	**13,092**	**4,745**	**1,593**	**285,035**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
26174051-Llagas Ck—Upper, LERRDs	43,057	1,983	1	0	0	0	0	0	0	45,040
26174052-Llagas Ck—Upper, USACE Coordination	40,895	10,171	0	46,273	48,576	47,278	11,816	3,277	332	208,617
26174053-Llagas Ck—Upper, Technical Studies	1,446	0	0	0	0	0	0	0	0	1,446
26174054-Llagas Ck—Upper, Design	27,932	261	5,418	0	0	0	0	479	1,261	29,933
50C40335-Llagas Ck—Upper, Construction Rch 5, 6, & 7b	0	17,510	0	6,180	0	0	0	0	0	23,690
TOTAL	**113,330**	**29,925**	**5,419**	**52,453**	**48,576**	**47,278**	**11,816**	**3,756**	**1,593**	**285,036**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Clean, Safe Creeks and Natural Flood Protection Fund	17,900
SCVWD Safe Clean Water Program Fund	125,464
Watershed Stream Stewardship Fund	23,690
State of California	39,208
City of Morgan Hill	3,341
NRCS Grants (Unsecured)	75,432
Total	**285,035**
USACE - In-kind Services	65,000

OPERATING COST IMPACTS

Operation costs are currently anticipated to be approximately $1,500,000 per year, beginning in FY26.

USEFUL LIFE: 30+ Years

Multiple Watersheds

Flood Protection CIP Projects

Major Capital Improvements Identified

NOTE:
Location of Erosion Repair projects are not identified on this map.

Project	**San Francisco Bay Shoreline**
Program	Flood Protection – Multiple Watersheds
Project No.	00044026s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Typical natural tidal marshland in San Francisco Bay near the Shoreline project area

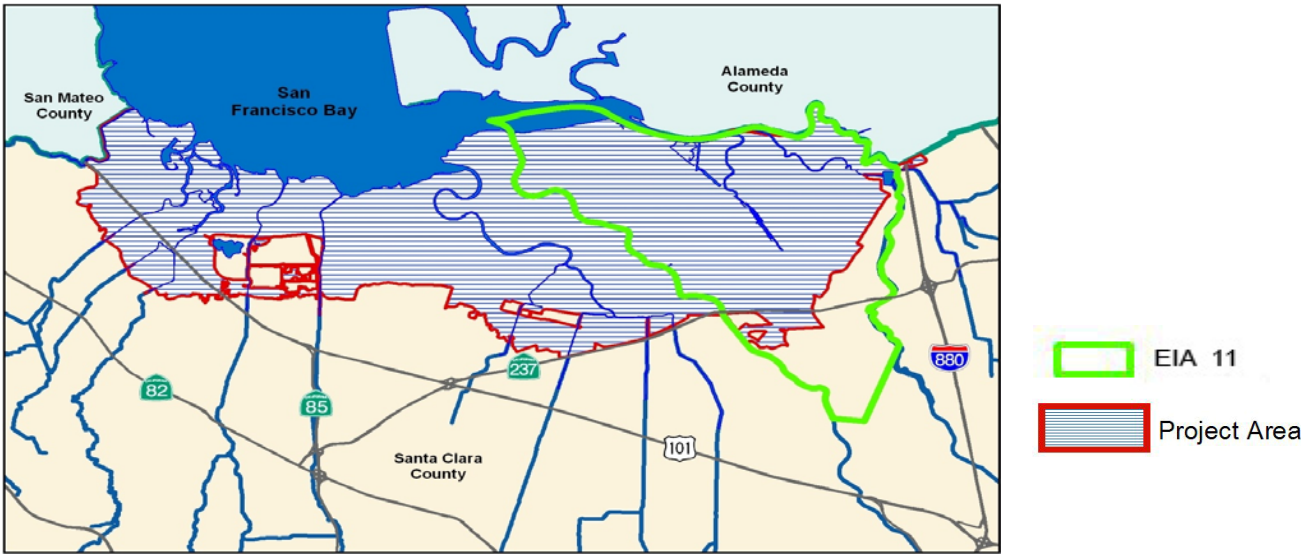
PROJECT DESCRIPTION

This project partners with the California Coastal Conservancy, U.S. Army Corps of Engineers (USACE) and key stakeholders to conduct an integrated, multi-objective project along the San Francisco Bay Shoreline. Project number 00044026 funded the USACE Feasibility Study effort for the North San Jose area, known as Economic Impact Area 11 (EIA 11) which was completed in FY17; this project number will continue to fund other Shoreline efforts outside of the Safe, Clean Water (SCW) project numbers. Valley Water's share of the EIA 11 flood risk management design and construction is $46.8M. Valley Water has been awarded a total of $61 million from a Measure AA grant to partially fund the design and construction of EIA 11. SCW funds will provide $15 million toward Valley Water's cost share of the design and partial construction efforts for EIA 11 and $5 million toward the Valley Water's cost share of the planning and design efforts for the remaining EIAs to accomplish the following objectives:

- Provide integrated fluvial and 1% coastal flood protection.
- Provide protection for future sea level rise.
- Restore and/or enhance tidal marsh and related habitats.
- Provide recreational and public access opportunities.
- Pursue continued federal funding.
- Obtain a letter of map revision from the Federal Emergency Management Agency at completion of the Construction Phase.
- Coordinate closely with the South Bay Salt Pond Restoration Project, City of San Jose, U.S. Fish and Wildlife Services, the community and key stakeholders.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project E7. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

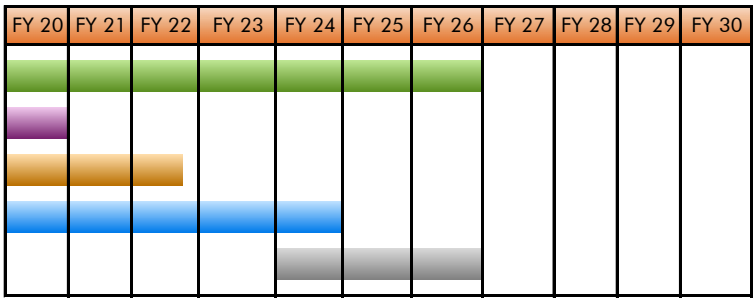
PROJECT LOCATION



SCHEDULE & STATUS

July 2005 to June 2026

Phase	Cost
Plan	18,441
Permits	349
Design	7,031
Constructi	108,601
Closeout	200
	139,022



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	FY19	FY20	FY21	FY22	FY23	FY24	FY25	Future	
00044026-San Francisco Bay Shoreline	14,020	36,690	11,143	21,007	1,572	30,572	100	100	115,204
with inflation	14,020	36,690	11,143	22,316	1,820	34,551	128	133	120,799
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	359
with inflation	359	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	9,955	7,561	0	0	0	0	0	0	17,516
with inflation	9,955	7,561	0	0	0	0	0	0	17,516
26444002-Other EIAs Planning	2,133	980	630	600	500	500	500	100	5,943
with inflation	2,133	980	630	662	579	608	638	133	6,362
TOTAL	**26,467**	**45,231**	**11,928**	**21,607**	**2,072**	**31,072**	**600**	**200**	**139,022**
with inflation	**26,467**	**45,231**	**11,773**	**22,977**	**2,399**	**35,158**	**766**	**265**	**145,036**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	FY19	FY20		FY21	FY22	FY23	FY24	FY25	Future	
00044026-San Francisco Bay Shoreline	17,278	33,432	0	11,143	22,316	1,820	34,551	128	133	120,799
62044042-Shoreline Early Implementation	359	0	0	0	0	0	0	0	0	359
26444001-EIA 11 Design & Part Construction	14,516	3,000	0	0	0	0	0	0	0	17,516
26444002-Other EIAs Planning	3,757	0	644	0	648	579	608	638	133	6,362
TOTAL	**35,910**	**36,432**	**644**	**11,143**	**22,963**	**2,399**	**35,158**	**766**	**265**	**145,036**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	56,430
SCVWD Clean, Safe Creeks and Natural Flood Protection Fund (Environmental Enhancement Grant)	2,011
SCVWD Safe, Clean Water and Natural Flood Protection Fund	23,878
California Department of Water Resources	420
SFBRA Measure AA (Grant)	61,466
SFBRA Measure AA (Ballot Reimbursement)	831
Total	**145,036**
Federal Partners, South Bay Salt Ponds (SBSP)	48,470
State, SBSP	14,720
Foundations, Packard-Hewlett-Goldman-Moore, SBSP	17,060
Coastal Conservancy, Shoreline	2,010
Federal, USACE, Shoreline	8,990
Total Partnership Funding for In-kind Services	**91,250**

OPERATING COST IMPACTS

Operating costs will be determined at the completion of the construction phase.

USEFUL LIFE: Not Available

Project	**Watersheds Asset Rehabilitation Program**
Program	Flood Protection - Multiple Watersheds
Project No.	62084001
Contact	Ngoc Nguyen nnguyen@valleywater.org

View of damage caused by burrowing animals along West Branch of Llagas Creek in the Uvas/Llagas Watershed

PROJECT DESCRIPTION

This project plans, designs, and constructs repairs to levee and stream bank sites that have erosion damage. Each site requires a different type of repair based on location, severity, and velocities in the creek. The objective of this project is to restore the stream bank or levee to a stable condition so as to reduce the risk of flooding and/or damage to adjacent properties and facilities. For facilities with animal conflict damage, the objective is to repair the damage caused by animals and where applicable, install deterrents for future animal activities. The repair work consists of, but is not limited to:

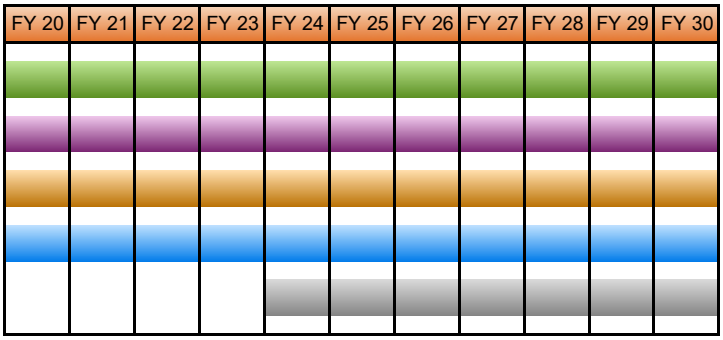
- Excavation and rebuilding of eroded soil material.
- Installation of rodent barriers such as mesh or fabric.
- Repairing the banks with methods commensurate with the extents of damage and environmental constraints.
- Geomorphic channel restoration with bed and bank repair.
- Outfall restoration and repair.
- Sediment removal and blockage repair.
- Fish ladder modifications and repairs.

PROJECT LOCATION

SCHEDULE & STATUS

Several small projects go through the design and construction phases each year under the Stream Maintenance Program 2 permit.

Phase	Cost
Plan	3,812
Permits	5,585
Design	16,939
Construct	97,209
Closeout	670
	146,587



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62084001-Watersheds Asset Rehabilitation Program	24,561	11,375	3,531	2,288	2,372	2,351	2,331	97,778	146,587
with inflation	24,561	11,375	3,531	2,489	2,695	2,790	2,889	140,555	190,885

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62084001-Watersheds Asset Rehabilitation Program	24,455	11,481	0	3,531	2,489	2,695	2,790	2,889	140,555	190,885

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	190,885
City of Palo Alto (Matadero Creek)	227
Total	**190,885**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Water Resources Stewardship

Water Resources Stewardship Capital Improvements

WATER RESOURCES STEWARDSHIP OVERVIEW

Valley Water plans, designs and constructs various capital projects to meet the Board's Ends Policy E-4, "There is water resources stewardship to protect and enhance watersheds and natural resources and improve the quality of life in Santa Clara County." These projects may fulfill environmental enhancement, mitigation, or stewardship goals and priorities.

Valley Water has placed an emphasis on stewardship since 1999 when Valley Water's Board of Directors adopted a mission and policies that added a focus on environmental stewardship. In 2001, the California legislature added environmental stewardship to Valley Water's purpose. Specifically, Valley Water's environmental stewardship activities focus on these three areas:

- Healthy creek and bay ecosystems
- Clean, safe water in creeks and the bay
- Improved quality of life through trails, open space and water resources management

Valley Water's stewarship work is extensive. Actions to protect the environment are woven into all we do. Some of Valley Water's stewardship accomplishments since 2000 are:

- Rehabilitated or restored 90 acres of riparian habitat and 500 acres of tidal wetland habitat
- Provided funding for 92 projects that resulted in 71 miles of public access
- Removed over 15,000 lbs of mercury from the creeks in 2017-2018
- Removed more than 20 fish passage impediments
- In conjunction with the Open Space Authority, acquiring 1,300 acres of land for preservation of California Red Legged Frog and California Tiger Salamander habitat
- Completed a draft of existing conditions analysis of fish passage barriers

Environmental Enhancement & Stewardship Projects

Valley Water's Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program), approved by the voters of Santa Clara County in 2012, committed funding for environmental enhancement activities that create or restore tidal or riparian habitat. The CIP Planning Process will be conducted to allocate the Safe, Clean Water Program funding to the enhancement opportunities that meet Board-defined characteristics.

Environmental enhancement projects are constructed at the direction of the Board either to meet the Safe, Clean Water Program obligations or to meet other Board priorities.

Stewardship projects are implemented to promote water quality awareness; reduce pollutants in streams; support additional trails, parks and open space; support creek side recreation; and reduce greenhouse gases. Stewardship projects are implemented as required by the Safe, Clean Water Program or at the discretion of the Board when reasonable and appropriate. These projects are often accomplished in partnership with or support of other agencies.

Major Capital Improvements Identified in the CIP

- Watershed Habitat Enhancement Design & Construction
- Stevens Creek Fish Passage Enhancement
- Hale Creek Enhancement Pilot Study
- Almaden Lake Improvements
- Salt Ponds A5-11 Restoration
- Safe, Clean Water Program Fish Passage Improvements
- Ogier Ponds Separation from Coyote Creek

Mitigation Projects

Valley Water manages many mitigation sites and continues to plan, design, and construct new mitigation sites to fulfill California Environmental Quality Act (CEQA) and regulatory permit requirements for both capital projects and operations activities.

Water Resources Stewardship Capital Improvements

Mitigation requirements for capital projects may be incorporated into the project scope or accomplished as a separate project.

Major Capital Improvements Identified in the CIP

- Stream Maintenance Program (SMP) Mitigation, Stream and Watershed Land Preservation

Feasibility Studies

In July 2016 the Board provided direction for increased visibility and accelerated delivery of environmental stewardship projects to meet Board priorities. Valley Water has dedicated additional full-time positions to complete the feasibility studies. These feasibility studies will determine the viability of projects that are of interest to the community.

Major Capital Improvements Identified in the CIP

- Watershed Habitat Enhancements

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

Projects under the Safe, Clean Water Program have funding allocations and if additional funds are required, the Board may direct that other available revenue be used to implement the proposed projects. Environmental enhancement and stewardship projects not included in the Safe, Clean Water Program are implemented at the discretion of the Board. The inclusion of these projects in the FY 2021-25 CIP has been approved by the Board.

Implementation of mitigation projects is considered non-discretionary since they are needed to meet CEQA or regulatory permit commitments. Funding for mitigation projects is allocated per the CIP Planning Process.

Financial analysis of the following funding sources for Water Resources Stewardship capital improvements determined that the funding needs for approved projects can be met:

- Watershed and Stream Stewardship Fund
- Safe, Clean Water Fund
- Water Utility Enterprise Fund

It is understood that new capital projects have an impact on future operations and maintenance, and this is included in the financial analysis. Periodically throughout the project, projections of this impact are updated to reflect changes to the project elements.

Water Resources Stewardship Capital Improvements

The following table is a project funding schedule for water resources stewardship capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The cart also identifies partially funded projects and estimated unspent appropriation from FY 2019-20.

Water Resources Stewardship Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
	ENVIRONMENTAL ENHANCEMENT & STEWARDSHIP										
	Lower Peninsula Watershed										
00294001s	Stevens Creek Fish Passage Enhancement D4.x	850	-	-	-	2,471	6,539	3,705	3,716	2,254	19,535
26164001	Hale Creek Enhancement Pilot Study (D6)	4,832	21	2,699	170	3,970	-	-	-	-	8,993
	Guadalupe Watershed										
26044001	Almaden Lake Improvements (D4.1a)	4,554	1,153	1	1,709	15,832	8,523	-	-	-	31,771
	Coyote Watershed										
00C40400s	Watershed Habitat Enhancement Design & Construction	-	-	-	-	2,205	2,315	2,431	11,710	48,562	67,223
	Multiple Watersheds										
20444001s	Salt Ponds A5-11 Restoration	5,630	-	652	171	617	1,313	456	1,897	1,953	12,037
26044002	SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	4,280	1,048	1,941	-	3,442	-	-	-	-	8,770
26C40370	SCW Implementation Fund	-	-	-	-	2,127	1,184	218	-	-	3,529
26044003	Ogier Ponds Separation from Coyote Creek (D4.1b)	1,000	598	1,192	-	1,659	996	-	-	-	4,253
	ENVIRONMENTAL FEASIBILITY STUDIES										
62044001	Watershed Habitat Enhancement Studies	2,372	704	380	532	-	-	-	-	-	3,608
	ENVIRONMENTAL MITGATION										
62184001	SMP Mitigation, Stream and Watershed Land Preservation	16,733	36	605	-	-	-	-	-	-	16,769
	TOTAL	40,251	3,560	7,470	2,582	32,323	20,870	6,810	17,323	52,769	176,488

FY 2019-20 Funds to be reappropriated

The following table shows funding requirements from each funding source for enhancement capital improvements.

Water Resources Stewardship - Funding Sources ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
61	Water Utility Enterprise Fund	5,597	21	2,699	170	7,883	5,018	2,475	11,710	30,316	63,190
12	Watershed Stream Stewardship Fund	28,826	1,893	1,382	2,412	17,212	13,672	4,117	3,716	20,500	92,348
26	Safe, Clean Water and Natural Flood Protection Fund	5,828	1,646	3,389	-	7,228	2,180	218	1,897	1,953	20,950
	TOTAL	40,251	3,560	7,470	2,582	32,323	20,870	6,810	17,323	52,769	176,488

FY 2019-20 Funds to be reappropriated

This page intentionally left blank.

Environmental Enhancement & Stewardship

Lower Peninsula Watershed

Project	**Stevens Creek Fish Passage Enhancements**
Program	Water Resources Stewardship - Environmental Enhancement
Project No.	00294001s
Contact	Vincent Gin vgin@valleywater.org

Example of a fish ladder to be modified or reconstructed for improved fish passage

PROJECT DESCRIPTION

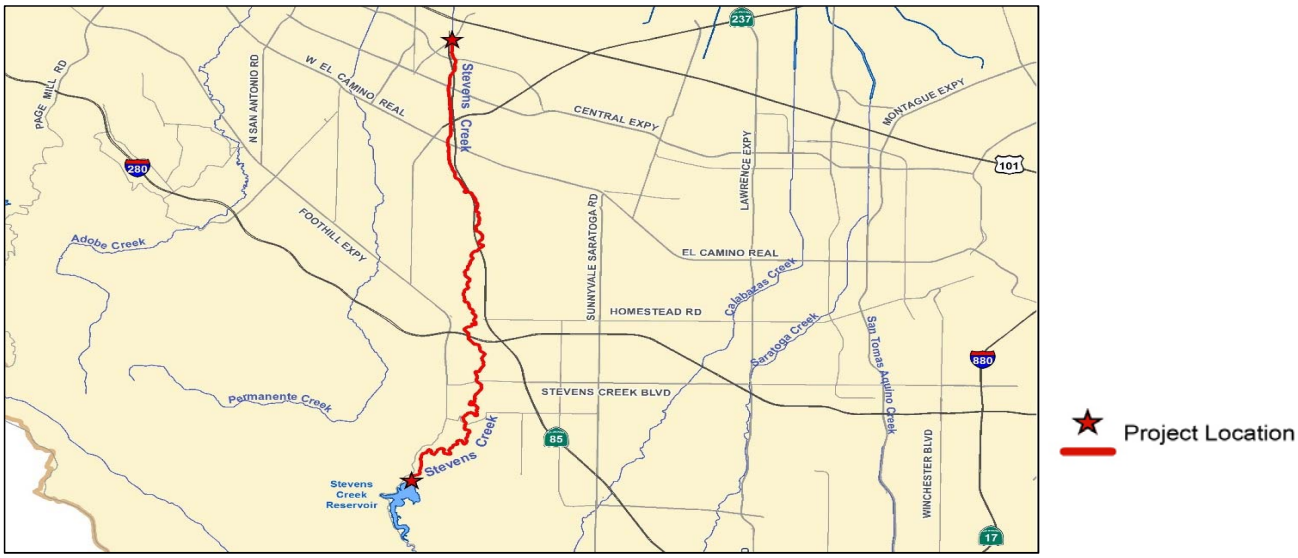
This project plans, designs, and constructs improvements to the Moffett Boulevard fish ladder to improve fish passage as well as a multiport outlet at Stevens Creek Dam to accomplish the following objectives:

- Restore and maintain a healthy steelhead trout population in the Stevens Creek watershed.
- Provide a suitable spawning and rearing habitat below Stevens Creek Dam within a cold water management zone determined on an annual basis through the development of an operations plan.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles.

This project is accounted for in the following:

- 00294001 Fish Passage Planning
- 00C40145 Moffett Boulevard Fish Ladder
- 00C40198 Multi-Port Outlet at Dam
- 62C40403 Stevens Creek Fish Barrier Removal Construction

PROJECT LOCATION



SCHEDULE & STATUS

July 2008 to June 2025

Planning phase is complete.
Project is on hold.

Phase	Cost
Plan	850
Permits	122
Design	2,970
Construct	13,266
Closeout	80
	17,288

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	850
with inflation	850	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	1,370	1,640	0	0	0	3,010
with inflation	0	0	0	1,510	1,792	0	0	0	3,302
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	352	1,106	40	0	0	1,498
with inflation	0	0	0	388	1,211	49	0	0	1,648
62C40403-Stevens Ck Fish Barrier Removal Construction	0	0	0	520	3,200	3,200	3,150	1,860	11,930
with inflation	0	0	0	573	3,536	3,656	3,716	2,254	13,735
TOTAL	**850**	**0**	**0**	**2,242**	**5,946**	**3,240**	**3,150**	**1,860**	**17,288**
with inflation	**850**	**0**	**0**	**2,472**	**6,539**	**3,704**	**3,716**	**2,254**	**19,535**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
00294001-FAHCE Stevens Ck Fish Passage Planning	850	0	0	0	0	0	0	0	0	850
00C40145-FAHCE Stevens Ck Fish Ladder at Moffett Blvd	0	0	0	0	1,510	1,792	0	0	0	3,302
00C40198-FAHCE Stevens Ck Dam Multi-Port Outlet	0	0	0	0	388	1,211	49	0	0	1,648
62C40403-Stevens Ck Fish Barrier Removal Construction	0	0	0	0	573	3,536	3,656	3,716	2,254	13,735
TOTAL	**850**	**0**	**0**	**0**	**2,472**	**6,539**	**3,704**	**3,716**	**2,254**	**19,535**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund–10%	1,954
SCVWD Water Utility Enterprise Fund–90%	17,582
Total	**19,535**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: 50 Years

Project	**Hale Creek Enhancement Pilot Study**
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	26164001
Contact	Ngoc Nguyen nnguyen@valleywater.org

Reach to be modified downstream of 7th Day Adventist foot bridge between Marilyn Drive and North Sunshine Drive

PROJECT DESCRIPTION

This pilot project plans, designs, and constructs improvements to an approximately 500-foot long reach in Hale Creek to accomplish the following objectives:

- Provide flood protection and enhance habitat.
- Restore stream recharge capability to a concrete-lined portion.
- Remove existing concrete channel and replace with a vegetated soft-bottom channel, to improve and restore the natural functions of the stream.

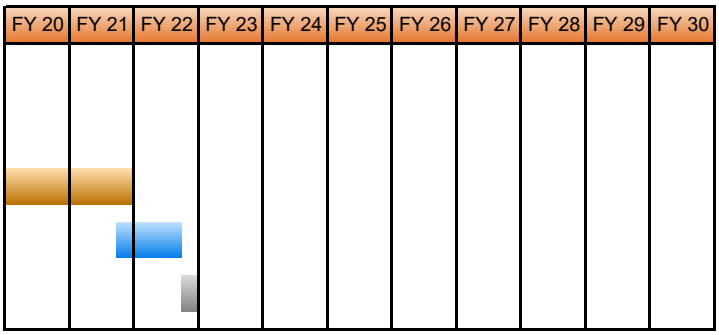
This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project D6. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

SCHEDULE & STATUS

July 2014 to June 2022

Phase	Cost
Plan	39
Permits	50
Design	2,064
Construct	6,552
Closeout	10
	8,717



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26164001-Hale Creek Enhancement Pilot Study	1,289	864	2,869	3,695	0	0	0	0	8,717
with inflation	1,289	864	2,869	3,970	0	0	0	0	8,992

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26164001-Hale Creek Enhancement Pilot Study	4,831	21	2,699	170	3,970	0	0	0	0	8,992

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	8,992
Other Funding Sources	0
Total	**8,992**

OPERATING COST IMPACTS

Operating cost impacts will be determined at the completion of the design phase.

USEFUL LIFE: Not available

Environmental Enhancement & Stewardship

Guadalupe Watershed

Project	**Almaden Lake Improvements**
Program	Water Resources Stewardship – Environmental Enhancement
Project No.	26044001
Contact	Ngoc Nguyen nnguyen@valleywater.org

A southern view of Almaden Lake, through which Alamitos Creek flows

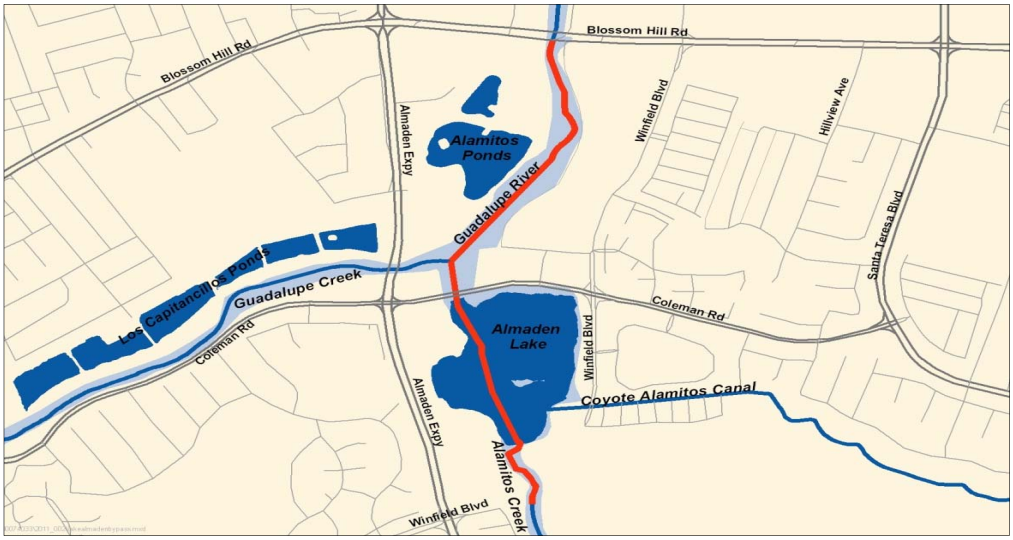
PROJECT DESCRIPTION

The project will separate Alamitos Creek from Almaden Lake and restore Alamitos Creek's stream function within the footprint of Almaden Lake. The goals are to improve water quality and physical habitat for steelhead and other anadromous fish by separating the creek from the lake while incorporating the principle of geomorphic design and to create a self-sustaining channel that requires little maintenance to keep it viable for fisheries and wildlife benefits. Benefits of this project will be the creation of channel complexity in the restored stream channel such as instream riffle-pool habitat, cover for rearing fish, gravel to support spawning and plantings that will provide numerous ancillary wildlife benefits; reduction of high water temperatures released from Almaden Lake into Alamitos Creek; and removal of entrainment, predatory and methylmercury impacts to anadromous fish from Almaden Lake. The objectives are as follows:

- Separate Alamitos Creek from Almaden Lake.
- Reduce thermal impediment to migration of anadromous fish.
- Remove entrainment and impacts from predatory species to anadromous fish.
- Reduce mercury concentration in target fish to meet applicable water quality objectives.
- Minimize impacts to recreational features.

This project is funded for the planning and design phase from the Safe, Clean Water (SCW), Priority D4. Funding for construction may also be available from the Safe, Clean Water Program. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

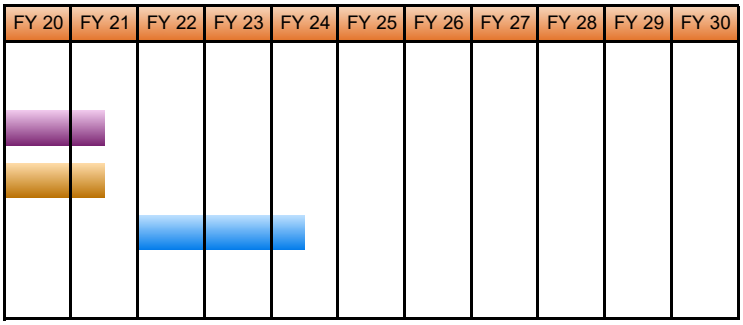


Project Location
1 Percent Floodplain

SCHEDULE & STATUS

July 2011 to December 2023

Phase	Cost
Plan	2,376
Permits	747
Design	2,580
Construct	24,211
Closeout	-
	30,139



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044001-Almaden Lake Improvements	3,914	1,792	1,710	14,923	7,800	0	0	0	30,139
with inflation	3,914	1,792	1,710	15,832	8,523	0	0	0	31,771

Actuals include project expenditures and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044001-Almaden Lake Improvements	4,554	1,153	1	1,709	15,832	8,523	0	0	0	31,771

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe,Clean Water Fund	31,771
Other Funding Sources	0
Total	**31,771**

OPERATING COST IMPACTS

Annual post-construction operating costs for this project are anticipated at approximately $75,000 starting in FY24.

USEFUL LIFE: 100 Years

Environmental Enhancement & Stewardship

Coyote Watershed

Project	**Watershed Habitat Enhancements Design & Construction**
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	00C40400s
Contact	Ngoc Nguyen nnguyen@valleywater.org

Aerial view looking downstream of the Ogier Pond complex

PROJECT DESCRIPTION

This project provides for future design and construction of possible habitat enhancements that may occur at Metcalf Ponds along Coyote Creek if feasible projects are identified by the feasibility study currently underway in Project 62044001, and the Board approves proceeding with the work. It also provides funding for possible future construction at Ogier Ponds along Coyote Creek, if the Board approves implementing a project being planned under project 26044003. Funding for this project is contingent on a successful Fisheries and Aquatic Habitat Collaborative Effort settlement. This project accomplishes the following objective:

- Enhance a healthy steelhead trout and salmon population in the Coyote Creek Watershed.

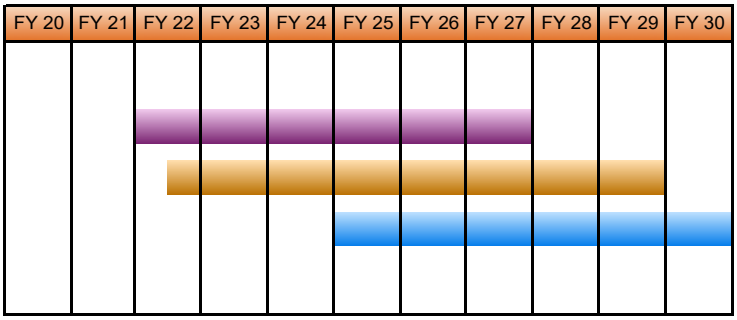
PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2021 to June 2031

Phase	Cost
Plan	-
Permits	2,000
Design	11,000
Construct	39,000
Closeout	-
	52,000



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95C40400 Project 1 Design & Construction (e.g. Metcalf Ponds)	0	0	0	2,000	2,000	2,000	10,000	10,000	26,000
with inflation	0	0	0	2,205	2,315	2,431	11,710	12,074	30,735
00C40401s Project 2 Construction (e.g. Ogier Ponds)	0	0	0	0	0	0	0	26,000	26,000
with inflation	0	0	0	0	0	0	0	36,488	36,488
TOTAL	**0**	**0**	**0**	**2,000**	**2,000**	**2,000**	**10,000**	**36,000**	**52,000**
with inflation	**0**	**0**	**0**	**2,205**	**2,315**	**2,431**	**11,710**	**48,562**	**67,223**

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95C40400 Project 1 Design & Construction (e.g. Metcalf Ponds)	0	0	0	0	2,205	2,315	2,431	11,710	12,074	30,735
00C40401s Project 2 Construction (e.g. Ogier Ponds)	0	0	0	0	0	0	0	0	36,488	36,488
TOTAL	**0**	**0**	**0**	**0**	**2,205**	**2,315**	**2,431**	**11,710**	**48,562**	**67,223**

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	48,979
SCVWD Watershed and Stream Stewardship Fund	18,244
SCVWD Safe, Clean Water Fund	0
Total	**67,223**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs for routine maintenance of the channel. The amount of the increase will be developed in the design phase, when adequate information on the staff-recommended alternative is available.

USEFUL LIFE: 50 years

Environmental Enhancement & Stewardship

Multiple Watersheds

Project	**Salt Ponds A5-11 Restoration**
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	20444001s
Contact	Vincent Gin vgin@valleywater.org

View of one of the former salt evaporation facilities near Alviso

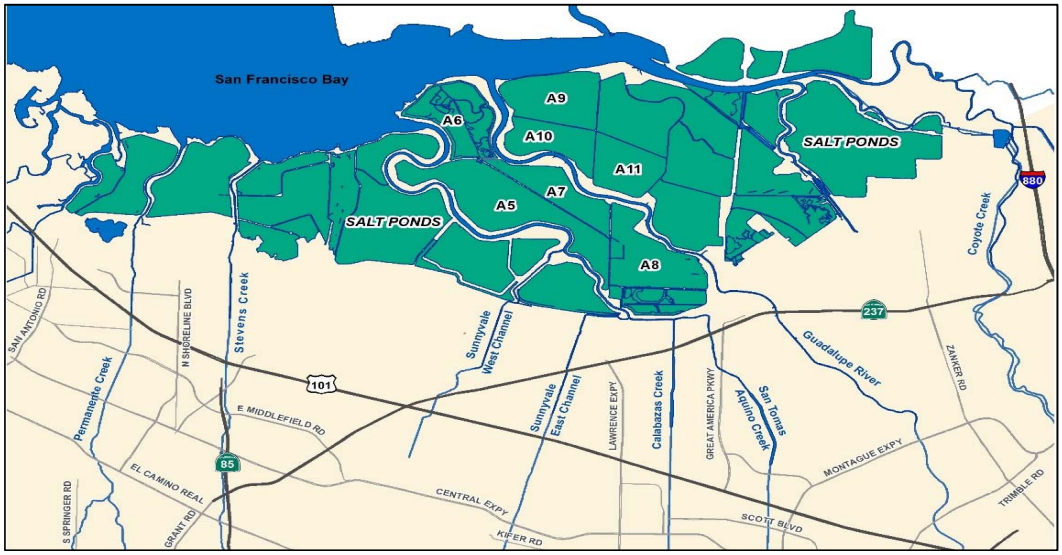
PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to the South Bay Salt Ponds to accomplish the following objectives:

- Realign Calabazas and San Tomas Creeks to flow directly into Pond A8.
- Meet permiting requirements for the creek's realignment or further restoration efforts.
- Fully open the Pond A8 Notch to increase tidal flow into the pond.
- Restoration of Ponds A5 through A11 of the Alviso Complex.
- Improve or construct roads at new placement sites.
- Restore the South Bay Salt Ponds to improve wildlife habitat and protect residents from tidal flooding.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project D8. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

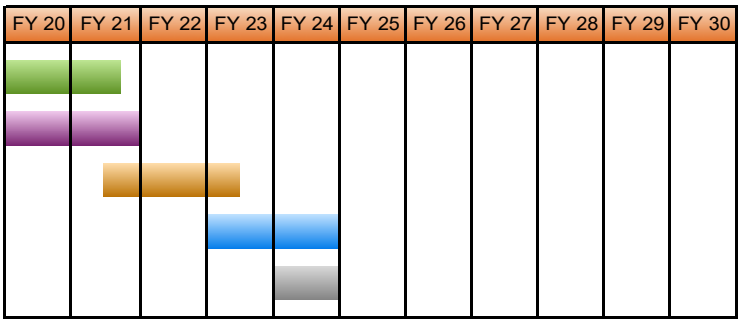


Project Location

SCHEDULE & STATUS

July 2013 to June 2024

Phase	Cost
Plan	1,259
Permits	220
Design	677
Construct	4,923
Closeout	5
	11,005



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
20444001 - Salt Ponds A5-11 Restoration	4,145	541	567	560	1,190	390	0	0	7,393
with inflation	4,145	541	567	617	1,313	456	0	0	7,639
26444003 - South Salt Ponds Restoration	279	13	12	12	12	12	1,636	1,636	3,612
with inflation	279	13	12	13	14	15	1,897	1,953	4,196
TOTAL	**4,424**	**554**	**579**	**572**	**1,202**	**402**	**1,636**	**1,636**	**11,005**
with inflation	**4,424**	**554**	**579**	**631**	**1,327**	**471**	**1,897**	**1,953**	**11,835**

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
20444001 - Salt Ponds A5-11 Restoration	5,082	0	396	171	617	1,313	456	0	0	7,639
26444003 - South Salt Ponds Restoration	548	0	256	0	0	0	0	1,897	1,953	4,398
TOTAL	**5,082**	**0**	**652**	**171**	**617**	**1,313**	**456**	**1,897**	**1,953**	**12,037**

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $202,000. Excess funding will be returned to reserves upon the end of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed and Stream Stewardship Fund	7,639
SCVWD Safe, Clean Water Fund	4,398
Other Funding Sources	0
Total	**12,037**

OPERATING COST IMPACTS

The completion of this project is anticipated to decrease operating costs by approximately $4 million every three years, beginning in FY24, by reducing on-going sediment removal.

USEFUL LIFE: Not Available

Project	**SCW Fish Passage Improvements** (D4.3)
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	26044002
Contact	Ngoc Nguyen nnguyen@valleywater.org

Removal of the Bolsa Road fish barrier will allow fish to travel upstream

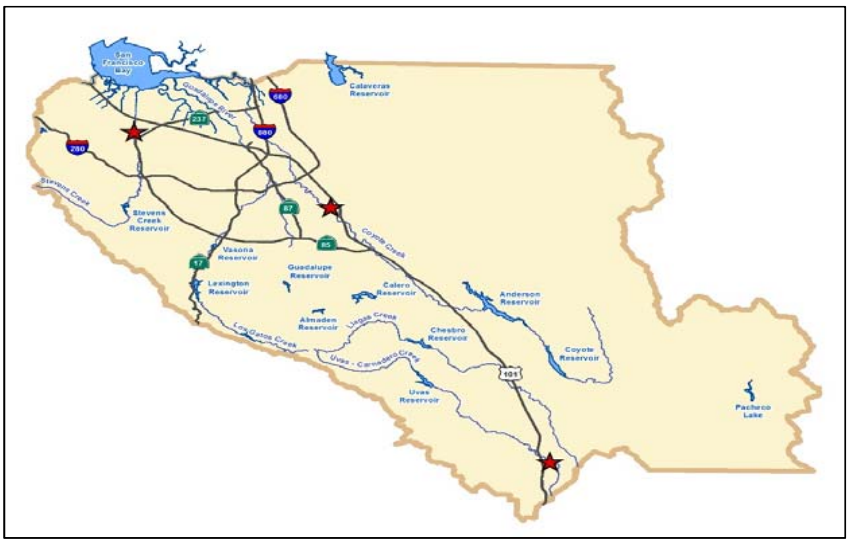
PROJECT DESCRIPTION

This project plans, designs and constructs improvements for two high priority fish barriers in Santa Clara County. A third priority barrier, owned by the City of San Jose, will be remediated through a project partnership with funds allocated from this project. The project will accomplish the following objectives:

- Planning, design and construction for a passage impediment at the Evelyn Bridge preventing upstream/downstream movement of steelhead in the Stevens Creek watershed. Remediation of this barrier will facilitate movement to 8.8 miles of higher quality upstream habitat and allow for out-migrant fish to access San Francisco Bay unimpeded. (Completed in 2016)
- Planning, design and construction for a passage impediment at the Bolsa Road railroad bridge in the Uvas Watershed. Remediation of this site will allow access to approximately 22 miles of higher quality habitat upstream as well as unimpeded access for out-migrant fish through the project site. Plans and specifications of a riffle pool system extending approximately 1,700 feet downstream of the Union Pacific Railroad bridge have been prepared at the 90% level, with permit applications submitted to resource agencies including California Department of Fish and Wildlife, Regional Water Quality Control Board, and U.S. Army Corps of Engineers.
- Prepare a partnership agreement and provide technical support to the City of San Jose for removal of the Singleton Road Bridge in Coyote Creek. Removal of this passage impediment will facilitate movement of migratory fish for approximately 17.6 miles creek above the site and allow for unimpeded access of out-migrant fish through the site.An interim crossing to replace/remove existing twin pipe culverts is being evaluated, meanwhile the City of San Jose seeks funding sources for the permanent bridge solution. Alternatives of this interim crossing under considerations include precast bridge slabs/girders, precast concrete arch, steel plate arch and salvaged railroad flatcar. Key criteria for the selected alternative will be the feasibility of completing construction by November 2019.

This project meets the commitments of the voter approved Safe, Clean Water Program (SCW), Project D4. For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

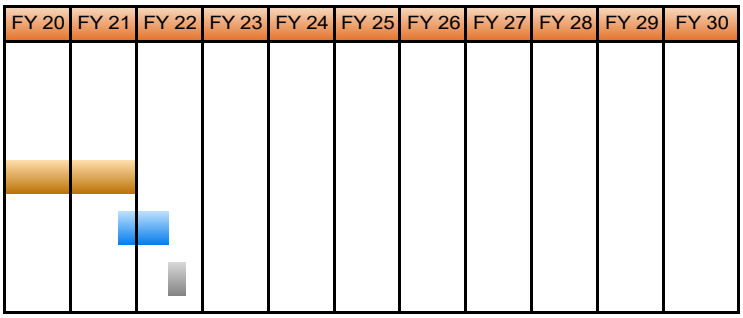


Project Location

SCHEDULE & STATUS

July 2015 to March 2022

Phase	Cost
Plan	227
Permits	265
Design	1,800
Construct	5,954
Closeout	50
	8,329



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044002-SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	2,814	573	31	4,911	0	0	0	0	8,329
with inflation	2,814	573	31	5,352	0	0	0	0	8,770

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044002-SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	4,280	1,048	1,941	0	3,442	0	0	0	0	8,770

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	8,770
Other Funding Sources	0
Total	**8,770**

OPERATING COST IMPACTS

The completion of this project is anticipated to increase operating costs by approximately $20,000 per year beginning in FY22.

USEFUL LIFE: 50 Years

Project	**SCW Implementation Fund**
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	26C40370
Contact	Ngoc Nguyen nnguyen@valleywater.org

One possible site: Almaden Lake, as shown here upstream from the Guadalupe Creek confluence

PROJECT DESCRIPTION

This project is a placeholder for future capital projects that have not been fully defined. These projects will implement Safe Clean Water (SCW) objectives for Priority D like construction of Almaden Lake Improvements. Funds will be moved from this placeholder into projects once they have been defined and vetted to ensure they meet the following program objectives:

- Create favorable stream conditions to restore and maintain fisheries.
- Increase the stability of stream channels through construction based on geomorphic principles.

PROJECT LOCATION

No map is provided for this project

SCHEDULE & STATUS

July 2018 to June 2032

Data provided is based on preliminary information. Specific projects identified to move forward will require further refinement. A Phase schedule will be defined in the planning phase.

Phase	Cost
Plan	-
Design	-
Construct	3,529
Closeout	-
	3,529

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26C40370-SCW Implementation Fund	0	0	0	2,127	1,184	218	0	0	3,529
with inflation	0	0	0	2,127	1,184	218	0	0	3,529

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26C40370-SCW Implementation Fund	0	0	0	0	2,127	1,184	218	0	0	3,529

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	3,529
Total	**3,529**

OPERATING COST IMPACTS

No operating cost impacts are anticipated from this project, as it is a placeholder project only.

USEFUL LIFE: Not Available

Project	**SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)**
Program	Water Resources Stewardship - Environmental Enhancements
Project No.	26044003
Contact	Vincent Gin vgin@valleywater.org

Ogier Pond complex looking downstream. Coyote Creek enters in lower right. The pond is bordered by Coyote Creek Trail on the right, and a cherry orchard on the left.

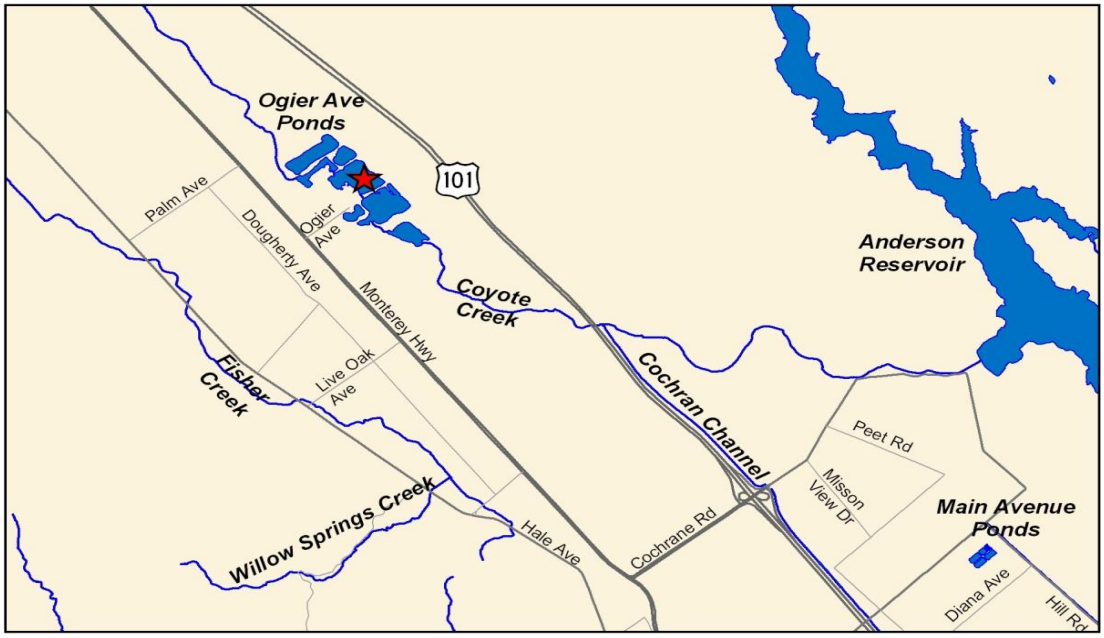
PROJECT DESCRIPTION

This project plans and designs possible improvements to separate Ogier Ponds from Coyote Creek where they meet, approximately 3,800 feet upstream of Ogier Avenue in San Jose, to meet the following objectives:

- Meet regulatory requirements for implementation of the Dam Maintenance Program so Valley Water can continue to maintain adequate water supply for Santa Clara Valley residents.
- Eliminate the temperature and predation traps and improve passage for Chinook salmon and steelhead.
- Preserve the existing open water habitat.
- Minimize impacts to the future recreational uses being planned by Santa Clara County.

This project was approved by the voters in the Safe, Clean Water Program (SCW) as Project D4 (planning & design phase). For a full description of the SCW benefits and KPIs, please visit www.valleywater.org.

PROJECT LOCATION

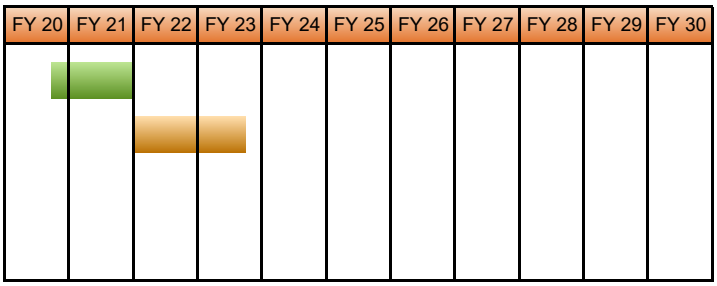


★ Project Location

SCHEDULE & STATUS

March 2019 through March 2023

Phase	Cost
Plan	1,761
Design	2,153
Construct	-
Closeout	-
	3,916



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044003-SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)	347	59	680	1,969	861	0	0	0	3,916
with inflation	347	59	680	2,171	996	0	0	0	4,253

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
26044003-SCW Ogier Ponds Separation from Coyote Creek (Planning & Design)	1,000	598	1,192	0	1,659	996	0	0	0	4,253

Adjusted Budget includes adopted budget plus approved budget adjustments

FUNDING SOURCES

(in thousands $)

SCVWD Safe, Clean Water Fund	4,253
Other Funding Sources	0
Total	**4,253**

OPERATING COST IMPACTS

No operating cost impacts are anticipated from this project, as it includes only the planning and design phases.

USEFUL LIFE: Not Available

Feasibility Studies

Project	**Watershed Habitat Enhancements**
Program	Water Resources Stewardship - Feasability Studies
Project No.	62044001
Contact	Vincent Gin vgin@valleywater.org

Aerial view looking downstream of the Ogier Pond complex

PROJECT DESCRIPTION

This project provides for feasibility studies of possible habitat enhancements at the Ogier Ponds and Metcalf Ponds along Coyote Creek, and an evaluation and determination of priority for addressing various fish passage barriers along Stevens Creek. This project accomplishes the following objectives:

- Enhance a healthy steelhead trout and salmon population in the Coyote Creek Watershed.
- Provide adequate passage for adult steelhead trout to reach suitable spawning and rearing habitat and for out-migration of juveniles along Stevens Creek.

PROJECT LOCATION

Project Location

SCHEDULE & STATUS

April 2017 to June 2021

Phase	Cost
Plan	2,400
Permits	-
Design	15
Construct	-
Closeout	-
	3,608

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62044001-Watershed Habitat Enhancements	2,369	327	912	0	0	0	0	0	3,608
with inflation	2,369	327	912	0	0	0	0	0	3,608

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62044001-Watershed Habitat Enhancements	2,372	704	380	532	0	0	0	0	0	3,608

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed & Stream Stewardship Fund	3,608
Other Funding Sources	0
Total	**3,608**

OPERATING COST IMPACTS

No operating impacts are anticipated from this project because this is a feasibility study.

USEFUL LIFE: N/A

Mitigation

San Francisco Bay
Calaveras Reservoir
Lower Peninsula Watershed
Drains to Adjacent Counties
West Valley Watershed
Stevens Creek Reservoir
Vasona Reservoir
Guadalupe Watershed
Coyote Watershed
Lexington Reservoir
Calero Reservoir
Guadalupe Reservoir
Anderson Reservoir
Almaden Reservoir
Chesbro Reservoir
Coyote Reservoir
Uvas Reservoir
Pacheco Lake
Uvas/Llagas Watershed
Legend
Major Capital Improvements
Valley Water Watersheds
Santa Clara County

Project	**SMP Mitigation Stream and Watershed Land Preservation**
Program	Water Resources Stewardship – Mitigation
Project No.	62184001
Contact	Vincent Gin vgin@valleywater.org

Creek-side settings such as this will be used for stream and watershed land preservation.

PROJECT DESCRIPTION

This project preserves streams and watershed lands in Santa Clara County and implements appropriate restorations in these lands to accomplish the following objectives:

- Provide Stream Maintenance Program (SMP) mitigation credits through preservation of streams and watershed lands to provide long-term protection of unique and valuable local stream resources and watersheds, in a largely self-sustaining setting. Approximately 110 acres of the total land preservation will be for protection of riparian and upland habitats that are known to support California red-legged frogs.
- Seek opportunities to partner with other organizations to accomplish the project objectives.

PROJECT LOCATION

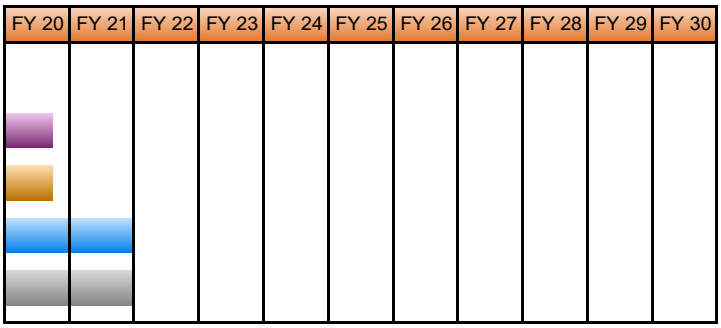
Project Location

SCHEDULE & STATUS

July 2004 to June 2021

Some environmental tasks in the planning phase continue through construction. Land acquisition is shown in the design phase, with restoration of site habitat shown in the construction phase.

Phase	Cost
Plan	1,940
Permits	3,718
Design	9,792
Construct	759
Closeout	250
	16,635



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62184001-SMP Mitigation Stream and Watershed Land Preservation	15,288	876	471	0	0	0	0	0	16,635
with inflation	15,288	876	471	0	0	0	0	0	16,635

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
62184001-SMP Mitigation Stream and Watershed Land Preservation	16,733	36	605	0	0	0	0	0	0	16,769

Adjusted Budget includes adopted budget plus approved budget adjustments. Funding exceeds planned expenditures by approximately $134,000. Excess funding will be returned to reserves upon completion of the project.

FUNDING SOURCES

(in thousands $)

SCVWD Watershed Stream Stewardship Fund	16,769
Other Funding Source	0
Total	**16,769**

OPERATING COST IMPACTS

Operating costs will vary depending on the type of acquisition of ownership, and requirements for maintenance of each site. Long-term management costs of acquired properties are budgeted in the SMP Mitigation Site Management project.

USEFUL LIFE: 50+ Years

Buildings and Grounds

Building and Grounds Capital Improvements

BUILDINGS AND GROUNDS OVERVIEW

Valley Water's Almaden-Winfield campus occupies nearly 50 acres along Almaden Expressway in the City of San Jose. Valley Water manages the campus to ensure a healthful and safe work environment for employees and visitors. The campus includes 10 buildings, multiple parking lots, a corporation yard, landscaping, and other appurtenances.

With most of the buildings on campus over 30 years old, the rehabilitation needs have steadily increased in recent years. Valley Water administers an asset management program for its buildings and grounds infrastructure that includes a schedule for maintenance and rehabilitation to ensure that each facility functions as intended over its useful life.

Major Capital Improvements Identified in the CIP

- Facility Management, Small Capital Improvements
- Headquarters Operations Building

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

Financial analysis of the following funding sources for buildings and grounds capital improvements was conducted to determine if there are limitations to funding all the proposed capital projects:

- Watershed and Stream Stewardship Fund
- General Fund
- Water Utility Enterprise Fund

The CIP Planning Process concluded that the Facility Management, Small Capital Improvements funding will be increased from $2 million per year to $3 million per year to meet Buildings and Grounds needs. Valley Water's Almaden Campus facilities are at or approaching full capacity. Staff, with the assistance of a consultant, are exploring alternatives to improve the facilities on the Almaden and Winfield campus, upgrade the employee work environment and maintain Valley Water facility assets. The Headquarters Operations Building project is a placeholder to fund the design and construction of the improvements approved by the Board.

Building and Grounds Capital Improvements

The following table is a project funding schedule for buildings and grounds capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2019-20.

Buildings and Grounds Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
60204016	Facility Management, Small Capital Improvements	n/a	2,063	-	3,016	2,984	3,000	3,000	3,000	15,000	32,063
60204032	Headquarters Operations Building	20	0	-	-	2,204	2,199	6,784	2,553	2,655	16,415
	TOTAL	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478

FY 2019-20 Funds to be reappropriated

The following table shows funding requirements from each funding source for buildings and grounds capital improvements.

Buildings and Grounds - Funding Sources ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
11	General Fund	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478
	TOTAL	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478

FY 2019-20 Funds to be reappropriated

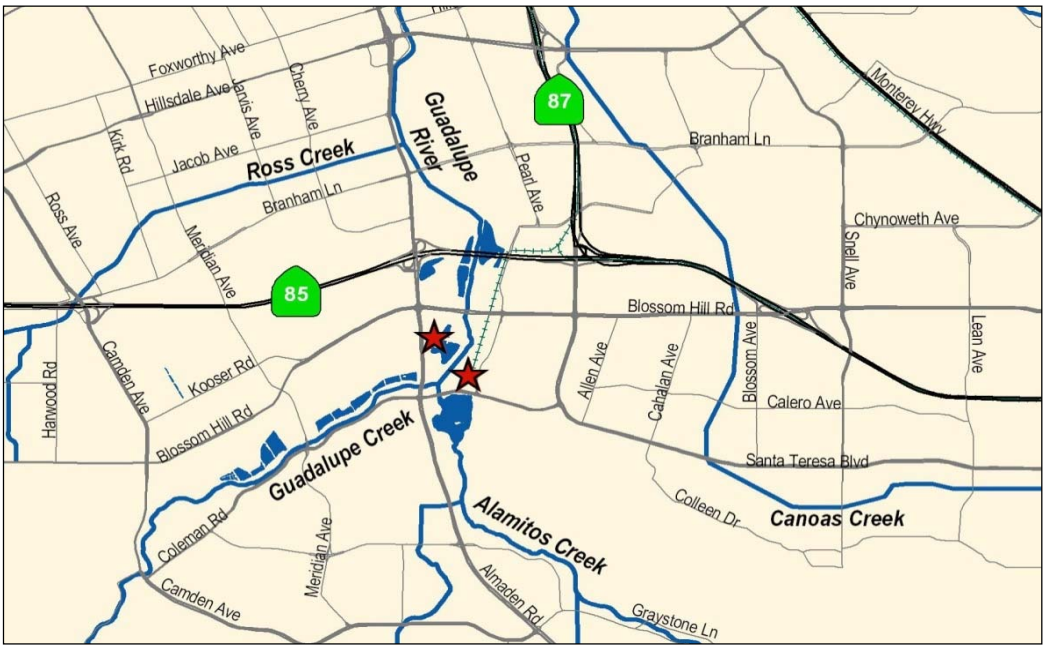
Project	**Facility Management, Small Capital Improvements**
Program	Buildings and Grounds
Project No.	60204016
Contact	Roslyn Fuller rfuller@valleywater.org

Front view of the Headquarters building at the Almaden Campus

PROJECT DESCRIPTION

This project reserves funding for capital maintenance and replacement of buildings, grounds, and facilities on the Almaden and Winfield campus, to provide a healthy and safe environment for staff and visitors.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

Improvements will be managed on an as-needed basis throughout the year.

Phase	Cost
Plan	n/a
Design	n/a
Construct	n/a
Closeout	n/a
	n/a

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60204016-Facility Management, Small Capital Improvements	n/a	2,063	3,016	2,984	3,000	3,000	3,000	15,000	32,063
with inflation	n/a	2,063	3,016	2,984	3,000	3,000	3,000	15,000	32,063

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60204016-Facility Management, Small Capital Improvements	n/a	2,063	0	3,016	2,984	3,000	3,000	3,000	15,000	32,063

Adjusted Budget includes adopted budget plus approved budget adjustments. Small Capital Improvement projects do not carry forward unspent funds from one fiscal year to the next. Unspent funds are returned to fund reserves at the close of each fiscal year and new funding is provided in the next fiscal year.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	32,063
Other Funding Source	0
Total	**32,063**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Headquarters Operations Building**
Program	Buildings and Grounds
Project No.	60204032
Contact	Roslyn Fuller rfuller@valleywater.org

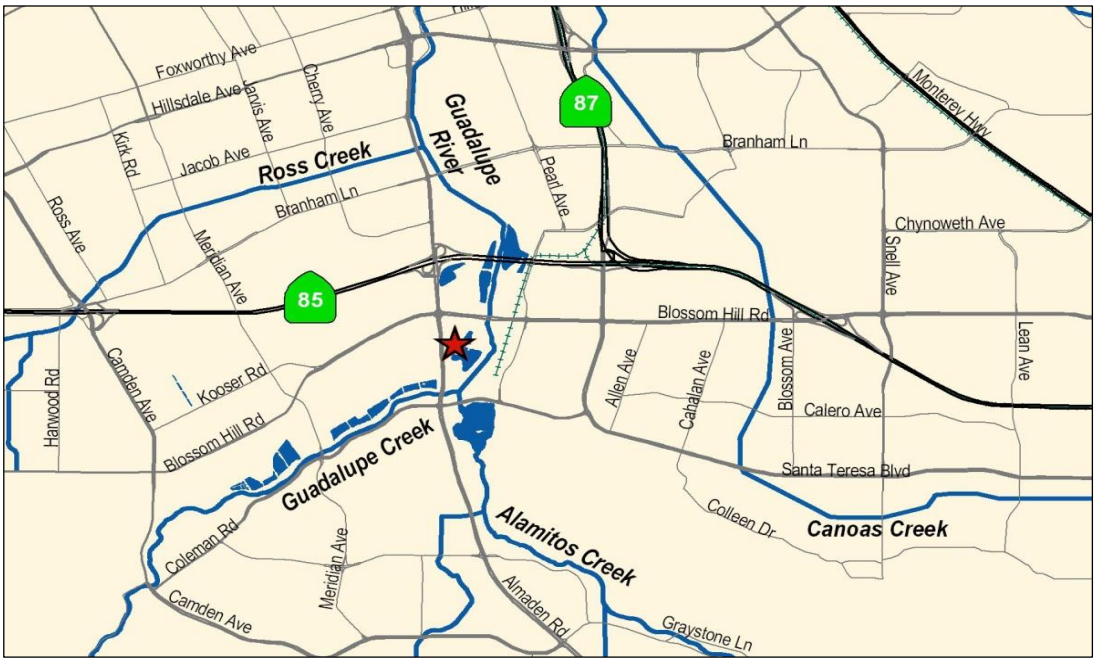
Existing Maintenance Building

PROJECT DESCRIPTION

This project is a placeholder to plan, design, and construct future facilities or improvements to existing facilities. This project accomplishes the following objectives:

- Replace office space in the Maintenance Office Building to provide a safe and healthy work environment.
- Provide adequate and sufficient space to enable Valley Water to efficiently perform its core business.

PROJECT LOCATION

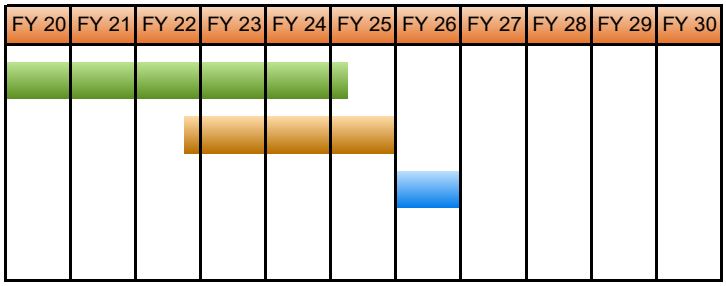


★ Project Location

SCHEDULE & STATUS

July 2014 to June 2026

Phase	Cost
Plan	1,976
Design	2,030
Construct	9,803
Closeout	50
	13,859



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60204032-Headquarters Operations Building	19	0	0	2,000	1,900	5,940	2,000	2,000	13,859
with inflation	19	0	0	2,205	2,199	6,784	2,553	2,655	16,414

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60204032-Headquarters Operations Building	20	0	1	0	2,204	2,199	6,784	2,553	2,655	16,414

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	16,414
Other Funding Sources	0
Total	**16,414**

OPERATING COST IMPACTS

Operating costs will be determined during the design phase.

USEFUL LIFE: Not Available

Information Technology

Information Technology Capital Improvements

INFORMATION TECHNOLOGY OVERVIEW

Valley Water relies on its software systems and technology infrastructure to help manage its core responsibilities of water supply, flood protection, and environmental stewardship. Recognizing the importance of Information Technology to its success, Valley Water completed the Information Systems Master Plan (ISMP) in 2012. The ISMP is an 8-year plan consisting of 32 capital and non-capital improvement projects. The ISMP was extended and refreshed through the completion of the 2019 Information Technology Strategic Plan, which identified critical areas of concentration through 2024.

In 2014, the Information Technology Capital Fund was created. It accounts for the costs to acquire, and install capital information technology projects with Valley Water-wide benefit. Projects include acquisition and replacement of computers, networks, and communications systems as well as major investments in enterprise software systems.

Costs are billed to user departments as Intra-District Computer Equipment Charges. Billing rates will be set to smooth charges over time by recovering current costs and accumulating reserves for major planned future projects. Current year charges or a combination of current year charges and reserves may be used to fund authorized projects. The purpose of this fund is to provide adequate resources while avoiding peaks and valleys in charges to user departments.

Major Capital Improvements Identified in the CIP

- Data Consolidation
- Information Technology Disaster Recovery
- ERP System Implementation
- Telephone System Voiceover IP
- Software Upgrades & Enhancements
- WTP-WQL Network Equipment
- Capital Construction Management System

CIP PLANNING PROCESS AND FINANCIAL ANALYSIS

The annual CIP Planning Process starts with collecting information on proposed new capital projects in July, followed by the validation of proposed new projects, preliminary scoping, review and financial analyses to produce a Draft CIP in February.

The Board then authorizes release of the Draft CIP to the public and local municipalities for review, conducts a public hearing, and approves the resolution to adopt the Final CIP in May.

Financial analysis of the Information Technology Capital Fund was conducted to determine if there are limitations to funding the planned capital projects.

Through the CIP Planning Process and financial analysis, it was determined that funding needs for approved Information Technology projects can be met.

Information Technology Capital Improvements

The following table is a project funding schedule for information technology capital improvements resulting from this year's financial analysis. Detailed information for each project can be found in this document on the following pages in the order presented in this table. The chart also identifies partially funded projects and estimated unspent appropriation from FY 2019-20.

Information Technology Capital Improvements ($K)

Project Number	PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
73274009	Data Consolidation	1,023	60	-	75	77	-	-	-	-	1,235
73274001	IT Disaster Recovery	2,396	-	946	-	67	-	-	-	-	2,463
73274002	ERP System Implementation	14,608	-	3,361	2,256	251	263	-	-	-	17,378
73274008	Software Upgrades & Enhancements	2,403	781	-	871	398	2,190	1,388	459	8,581	17,071
73274012	Telephone System Voiceover IP	-	1,116	-	132	-	-	-	-	-	1,248
73274011	E-Discovery Management System	545	16	-	-	-	-	-	-	-	561
95074039	Capital Construction Mgmt System	-	977	877	156	110	-	-	-	-	1,243
95274003	WTP-WQL Network Equipment	2,723	185	-	-	94	1,475	2,985	854	3,747	12,063
	TOTAL	23,698	3,135	5,184	3,490	997	3,928	4,373	1,313	12,328	53,262

FY 2019-20 Funds to be reappropriated

The following table shows funding requirements from each funding source for information technology capital improvements.

Information Technology - Funding Sources ($K)

Fund Number	FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
61	Water Utility Enterprise Fund	2,723	1,162	877	156	204	1,475	2,985	854	3,747	13,306
73	Information Technology Fund	20,975	1,973	4,307	3,334	793	2,453	1,388	459	8,581	39,956
	TOTAL	23,698	3,135	5,184	3,490	997	3,928	4,373	1,313	12,328	53,262

FY 2019-20 Funds to be reappropriated

Project	**Data Consolidation**
Program	Information Technology
Project No.	73274009
Contact	Mike Cook mcook@valleywater.org

Data consolidation will reduce Valley Water's data footprint

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Data management to accomplish the following objectives:

- Implement an enterprise content management (ECM) system with strong business intelligence.
- Move from an applications-centric model to a data-centric model, thereby removing silos of data stores.
- Manage data as a strategic core asset, with ongoing process and management control for data analytics.
- Provide and gain rapid insights using data analytics to solve complex business problems.
- Reduce the overall data footprint.

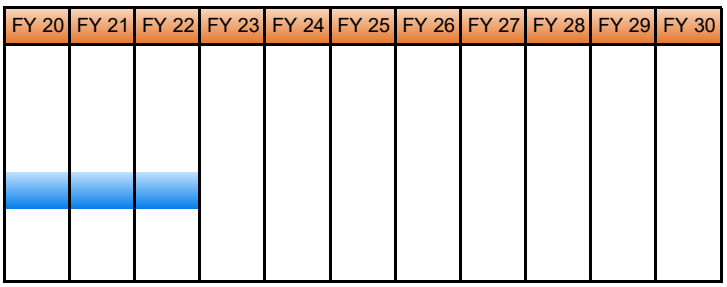
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2015 to June 2022

Phase	Cost
Plan	-
Design	-
Construct	1,131
Closeout	-
	1,231



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274009-Data Consolidation	121	962	75	73	0	0	0	0	1,231
with inflation	121	962	75	77	0	0	0	0	1,235

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274009-Data Consolidation	1,023	60	0	75	77	0	0	0	0	1,235

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	1,235
Other Funding Sources	0
Total	**1,235**

OPERATING COST IMPACTS

This project will migrate Valley Water's business unit process's into the selected ECM. ECM implementation will begin with the Community Projects Review Unit as the pilot project, followed by the Records & Library Unit. Ongoing annual costs will be determined at the end of construction, and will be based on the selected ECM solution.

USEFUL LIFE: Not Available

Project	**Information Technology Disaster Recovery**
Program	Information Technology
Project No.	73274001
Contact	Michael Cook mcook@valleywater.org

Existing Data Center that houses critical servers supporting Valley Water's normal operations

PROJECT DESCRIPTION

This project plans, designs, and implements improvements to Information Technology to accomplish the following objectives:

- Enable coordinated, rapid recovery from a disaster.
- Reduce Valley Water's business risk exposure.

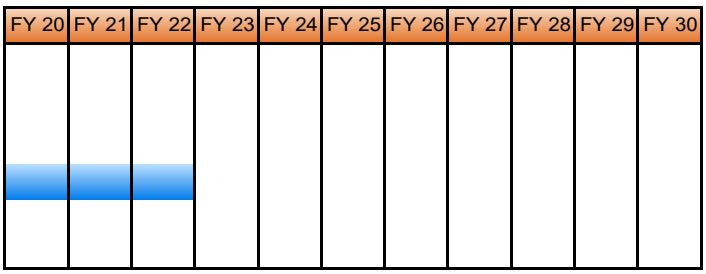
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2014 to June 2022

Phase	Cost
Plan	14
Design	12
Construct	1,803
Closeout	-
	2,451



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274001-Information Technology Disaster Recovery	671	779	801	200	0	0	0	0	2,451
with inflation	671	779	801	212	0	0	0	0	2,463

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274001-Information Technology Disaster Recovery	2,396	0	946	0	67	0	0	0	0	2,463

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	2,463
Other Funding Sources	0
Total	**2,463**

OPERATING COST IMPACTS

Ongoing annual costs will be determined at the completion of construction, and will be based on implemented solutions.

USEFUL LIFE: Not Available

Project	**ERP System Implementation**
Program	Information Technology
Project No.	73274002
Contact	Michael Cook mcook@valleywater.org

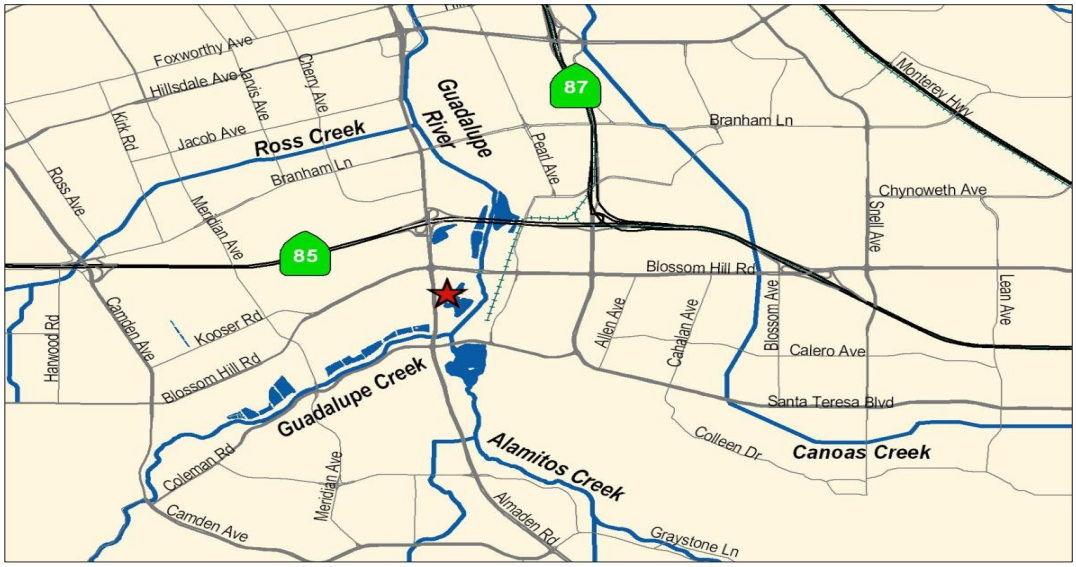
The new ERP system aims to increase operational efficiency

PROJECT DESCRIPTION

This project selects and implements a new cloud-based, integrated, proven and state-of-the-art Enterprise Resource Planning (ERP) system to replace the current out-of-date ERP application. Below are the objectives:

- Provide up-to-date functionalities for Finance, HR, Payroll, Contract, Procurement, Inventory, and Warehouse areas, and to reengineer business processes to ensure that Valley Water takes full advantage of the software's inherent capabilities.
- Increase operational effectiveness, reduce costs and improve management decision-making processes by increasing the ability to access and analyze data.
- Leverage a cloud platform to improve the availability of Financials, Supply Chain, Human Resources, and Payroll data.
- Minimize customizations and adopt best standard business practices during implementation.

PROJECT LOCATION

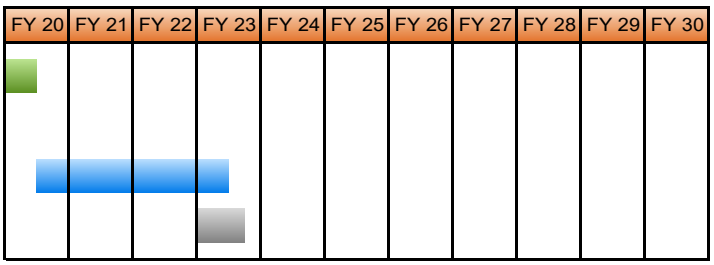


★ Project Location

SCHEDULE & STATUS

July 2013 to March 2023

Phase	Cost
Plan	-
Design	-
Construct	15,684
Closeout	100
	18,518



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60274062-ERP System Implementation	1,199	0	0	0	0	0	0	0	1,199
with inflation	1,199	0	0	0	0	0	0	0	1,199
73274002-ERP System Implementation	4,172	7,075	5,617	228	227	0	0	0	17,319
with inflation	4,172	7,075	5,617	251	263	0	0	0	17,378
TOTAL	5,371	7,075	5,617	228	227	0	0	0	18,518
with inflation	5,371	7,075	5,617	251	263	0	0	0	18,577

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
60274062-ERP System Implementation	1,199	0	0	0	0	0	0	0	0	1,199
73274002-ERP System Implementation	14,608	0	3,361	2,256	251	263	0	0	0	17,378
TOTAL	15,807	0	3,361	2,256	251	263	0	0	0	18,577

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD General Fund	1,199
SCVWD Information Technology Fund	17,378
Total	**18,577**

OPERATING COST IMPACTS

Upon completion of this project, one full-time employee will be required within the Software Services Unit for expanded technical support of the new system modules and features, and to continue with operational refinements, enhancements, integrations, report development.

USEFUL LIFE: 5 Years

Project	**Software Upgrades & Enhancements**
Program	Information Technology
Project No.	73274008
Contact	Michael Cook mcook@valleywater.org

Existing systems will be upgraded and enhanced

PROJECT DESCRIPTION

This project provides upgrade and enhancement services to existing Valley Water systems, including the enterprise resource planning system, geographic information system, enterprise asset management software Maximo, the Oracle database management system, internal and external Valley Water websites, and related databases. Previously, software upgrades were budgeted to their individual respective maintenance and support projects. This new project aims to consolidate activities into a single project for better organization, planning and budgeting purposes.

The objective of this project is to regularly upgrade existing software packages to:

- Stay in compliance and reduce risks associated with being on a version that is no longer supported.
- Leverage new functionalities of up-to-date software.

PROJECT LOCATION

No Map is provided for this project.

SCHEDULE & STATUS

July 2015 to June 2032

Phase	Cost
Plan	325
Design	221
Construct	12,100
Closeout	-
	13,576

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274008-Software Upgrades & Enhancements	1,574	1,610	871	361	1,892	1,142	360	5,766	13,576
with inflation	1,574	1,610	871	398	2,190	1,388	459	8,581	17,072

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274008-Software Upgrades & Enhancements	2,403	781	0	871	398	2,190	1,388	459	8,581	17,072

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	17,072
Other Funding Sources	0
Total	**17,072**

OPERATING COST IMPACTS

The completion of this project is not anticipated to increase or decrease annual operating costs, as the project does not significantly alter the existing facilities or modes of operation.

USEFUL LIFE: Not Available

Project	**Telephone System Voice Over IP**
Program	IT
Project No.	73274012
Contact	Michael Cook mcook@valleywater.org

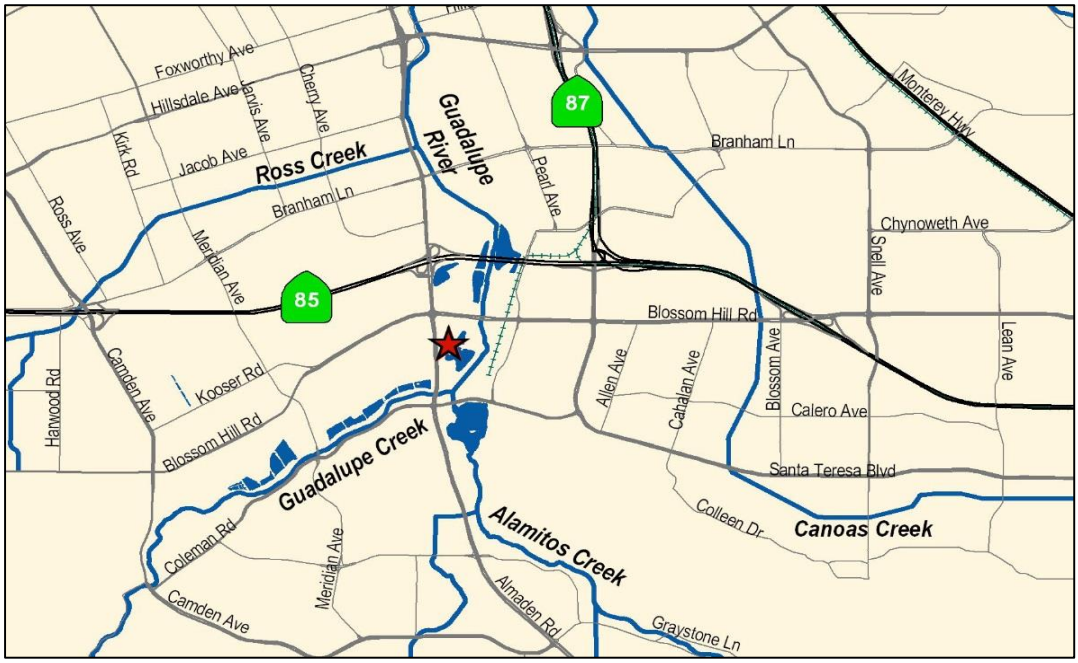
The current Avaya Telephone System was first installed in the Administration Building in 1986

PROJECT DESCRIPTION

This project plans, designs, and constructs improvements to Valley Water's Telephone system to accomplish the following objective:

- Replace current Avaya digital phone stations with new Avaya voice over IP telephone stations.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

July 2019 to June 2021

Phase	Cost
Plan	-
Design	-
Construct	1,248
Closeout	-
	1,248

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274012-Telephone System Voice Over IP	0	1,116	132	0	0	0	0	0	1,248
with inflation	0	1,116	132	0	0	0	0	0	1,248

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274012-Telephone System Voice Over IP	0	1,116	0	132	0	0	0	0	0	1,248

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

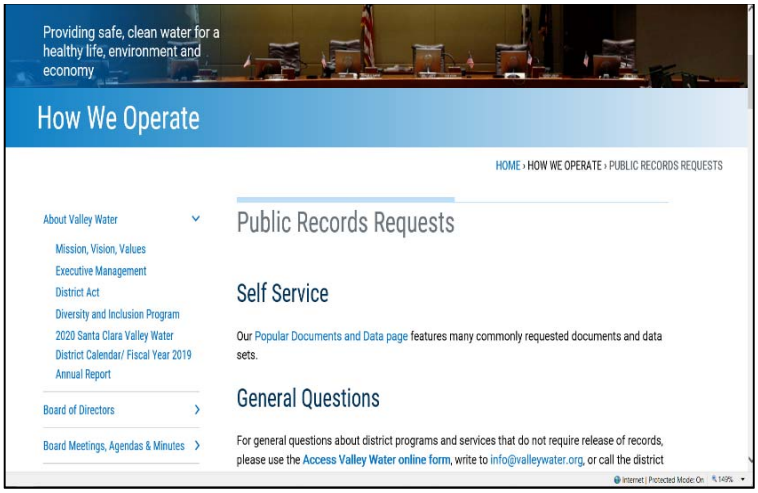
SCVWD Information Technology Fund	1,248
Other Funding Sources	0
Total	**1,248**

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**E-Discovery Management System**
Program	Information Technology
Project No.	73274011
Contact	Michael Cook mcook@valleywater.org



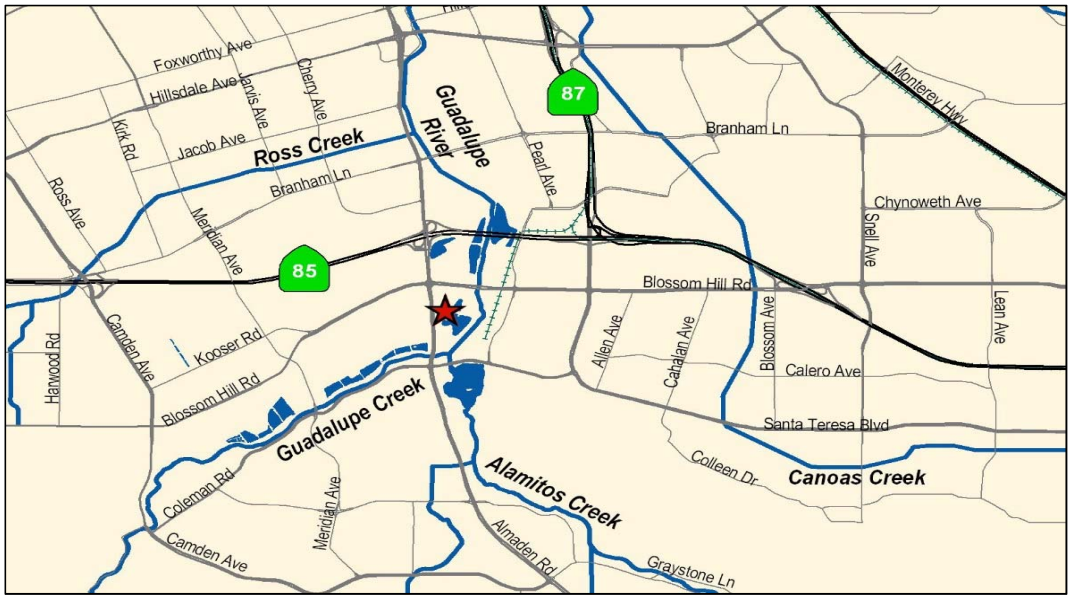
Screenshot of the Valley Water's Public Records web page

PROJECT DESCRIPTION

This project plans, designs, and implements a software solution to accomplish the following objectives:

- Issue formal notification of litigation holds.
- Search and locate/identify electronically stored information (ESI).
- Collect, preserve, process, review, and analyze ESI.
- Produce ESI in context to litigation, in response to California Public Records requests, and other government investigations.

PROJECT LOCATION



★ Project Location

SCHEDULE & STATUS

April 2017 to June 2020

Phase	Cost
Plan	-
Design	-
Construct	54
Closeout	-
	561

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274011-E-Discovery Management System	507	54	0	0	0	0	0	0	561
with inflation	507	54	0	0	0	0	0	0	561

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests					Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
73274011-E-Discovery Management System	545	16	0	0	0	0	0	0	0	561

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Information Technology Fund	561
Other Funding Sources	0
Total	**561**

OPERATING COST IMPACTS

Operation cost impacts will be provided after completion of the planning phase.

USEFUL LIFE: Not available

Project	**Capital Construction Management System**
Program	Water Supply - Treatment
Project No.	95074039
Contact	Erin Baker ebaker@valleywater.org

PROJECT DESCRIPTION

This project selects and implements a new capital project management software to accomplish the following objectives for large capital projects:

- Tracking of overall project performance.
- Management of entire project lifecycle: planning, design, construction, operations.
- Improve decision-making by evaluating real-time data.
- Establish centralized document management and control.

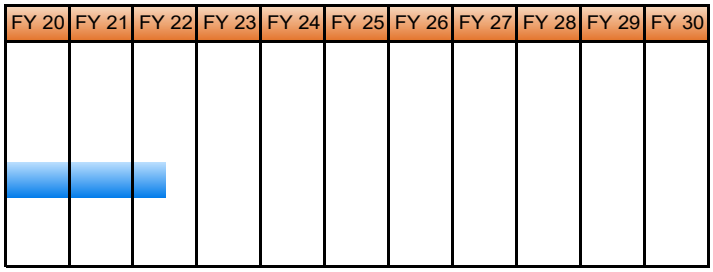
PROJECT LOCATION

No Map is provided for this project

SCHEDULE & STATUS

July 2019 to December 2021

Phase	Cost
Plan	-
Design	-
Construct	1,133
Closeout	100
	1,233



EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures						Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95074039-Capital Construction Management System	0	100	1,033	100	0	0	0	0	1,233
with inflation	0	100	1,033	110	0	0	0	0	1,243

Actuals include project expenditures, and encumbrances.

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95074039-Capital Construction Management System	0	977	877	156	110	0	0	0	0	1,243

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	1,243
Other Funding Sources	0
Total	**1,243**

OPERATING COST IMPACTS

N/A

USEFUL LIFE: N/A

Project	**WTP-WQL Network Equipment**
Program	Information Technology
Project No.	95274003
Contact	Michael Cook mcook@valleywater.org

View of network equipment to be modernized at the Water Quality Lab

PROJECT DESCRIPTION

This project plans, designs, and implements upgrades to the existing network to ensure that Valley Water has a current and robust computer network to accomplish the following objectives:

- Deliver greater access speeds.
- Restore vendor maintenance.
- Improve software application performance.
- Provide a path to meet future data communications needs.

PROJECT LOCATION

★ Project Location

SCHEDULE & STATUS

July 2014 to June 2032

Phase	Cost
Plan	-
Design	-
Construct	9,045
Closeout	-
	9,916

FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30

EXPENDITURE SCHEDULE

(in thousands $)

	Actuals Thru	Planned Expenditures							Total
Project	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95274003-WTP-WQL Network Equipment	1,337	1,571	0	85	1,274	2,456	669	2,524	9,916
with inflation	1,337	1,571	0	94	1,475	2,985	854	3,747	12,063

FUNDING SCHEDULE

(in thousands $)

	Budget Thru	Adj. Budget	Est. Unspent	Planned Funding Requests						Total
Project	**FY19**	**FY20**		**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**Future**	
95274003-WTP-WQL Network Equipment	2,723	185	0	0	94	1,475	2,985	854	3,747	12,063

Adjusted Budget includes adopted budget plus approved budget adjustments.

FUNDING SOURCES

(in thousands $)

SCVWD Water Utility Enterprise Fund	12,063
Other Funding Sources	0
Total	**12,063**

OPERATING COST IMPACTS

Upon completion of this project operating costs are anticipated to increase by $37,000 beginning in FY33 with an increase of 3% each year after that to pay for hardware maintenance agreements.

USEFUL LIFE: 10 Years

Financial Planning

Financial Planning and Summary

CIP FINANCIAL PLANNING

Board policy regarding financial planning and budgeting provides the foundation for CIP financial planning. The policy states:

Executive Limitation EL-4, "Financial planning for any fiscal year shall be aligned with the Board's Ends, not risk fiscal jeopardy, and be derived from a multi-year plan."

> Executive Limitation EL-4.3, "A BAO shall include credible projection of revenues and expenses, separation of capital and operational items, cash flow, and disclosure of planning assumptions."
>
> Executive Limitation EL-4.4, "A BAO shall plan the expenditure in any budget period within the funds that are conservatively projected to be received or appropriated from reserves in that period."

KEY REVENUES SOURCES

Water Charges

- Water charges include a ground water production charge, which is equivalent to the basic user charge, and is associated with the benefit of managing groundwater supplies. The groundwater charge is applied to water extracted from the groundwater basin in Zones W-2 and the newly modified Zones W-5, W-7 and W-8. The basic user charge is applied to other types of water delivered by Valley Water. There are two rates: one for agricultural water and one for municipal and industrial water.
- A treated water surcharge, which is associated with the benefit of receiving treated water, is levied in addition to the basic user charge on water delivered from Valley Water's water treatment plants.

Property Tax

Santa Clara County allocates property tax revenue to Valley Water from ad valorem taxes levied on land within the county.

Special Parcel Tax

In November 2012, voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program/SCW), which began July 1, 2013 and is due to sunset on June 30, 2028. This program replaced the Clean, Safe Creeks and Natural Flood Protection Plan that had been scheduled to sunset in 2016. The Safe, Clean Water Program has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water Program will provide over $750 million of special parcel tax revenue for operations and capital projects.

Benefit Assessments

Benefit assessment revenue consists of levies approved by voters in 1986 and 1990 to support financing for flood control capital improvements. The ongoing budget amount is approximately 1.25 times the duly authorized annual debt service requirements for each watershed.

Capital Reimbursements

Capital reimbursement revenues are from local, state and federal partners for capital projects carried on cooperatively by Valley Water and its partners. Valley Water fronts the partners' shares of capital expenditures and receives reimbursements from the partners at a later time.

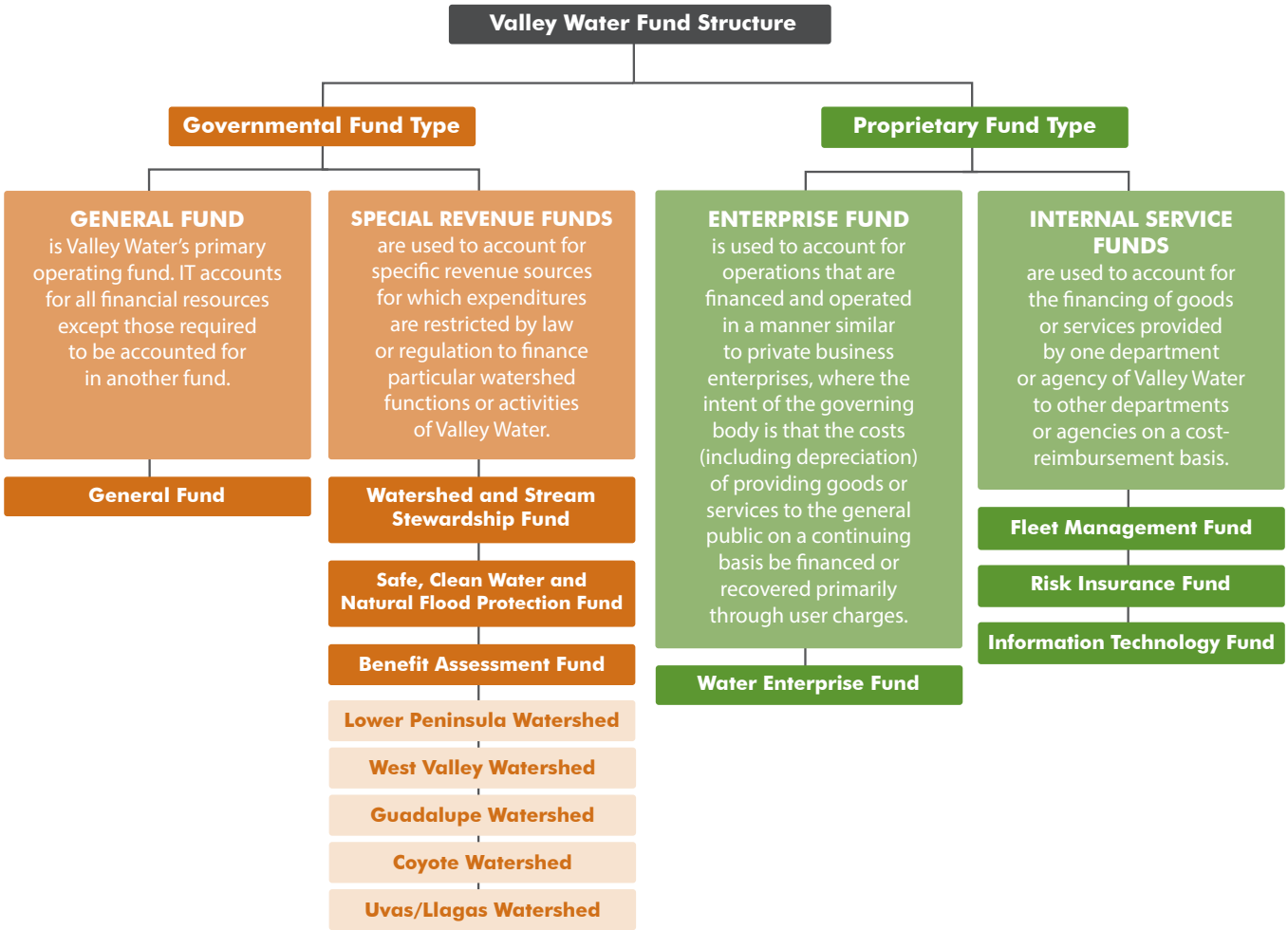
Interest

Interest is earned from Valley Water's investment portfolio.

Financial Planning and Summary

Valley Water Fund Structure

Valley Water's revenue sources are organized into eight funds. Each fund has specific revenue sources according to their intended purposes, and each fund is an independent accounting entity with a self-balancing set of accounts comprised of its assets, liabilities, fund equity, revenue, and expenditures or expenses, as appropriate.



Revenue by Fund ($K)

FUND NAME	FY19 Actual	FY20 Adopted	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Water Utility Enterprise	269,022	302,922	305,484	336,427	367,644	475,892	506,768	546,260	603,937	651,913	596,541	657,030
Watershed Stream Stewardship	98,609	121,194	117,804	121,206	127,425	116,143	112,836	115,812	119,556	123,489	127,561	130,903
Safe, Clean Water and Natural Flood Protection	72,603	63,731	61,115	106,344	101,956	52,204	53,165	54,409	55,792	57,733	59,073	61,464
Benefit Assessment	14,747	13,445	12,369	13,454	13,444	13,443	6,850	6,855	6,852	6,855	6,856	6,854
General	9,434	9,217	9,365	9,285	9,285	9,285	9,468	9,661	9,858	10,059	10,265	10,474
Internal Service	923	800	480	330	303	293	293	303	314	325	336	351
TOTAL	465,337	511,309	506,617	587,045	620,058	667,259	689,380	733,299	796,309	850,374	800,632	867,076

Note: Internal Service is the combination of the Fleet Management, IT Capital, and Risk Funds

Financial Planning and Summary

Revenue Projections

Valley Water regularly updates the projected revenues based on the best information available.

- Revenues from water charges are estimated based on projections of water demand for residential, commercial, industrial, and agricultural consumption combined with rates per acre-foot. Rates are set at a level that will provide revenue needed to meet operating and capital needs.
- Revenues from property taxes, special parcel taxes, and benefit assessments are estimated based on projection of growth in assessed value and number of developed parcels in Santa Clara County.
- Interest earnings are estimated based on the projected average cash balances during the fiscal year and expected yield from Valley Water's investment portfolio.
- Revenue from capital reimbursements partnerships are estimated based on the terms of agreements executed by Valley Water and its partners.

Expenditure Projections

Valley Water regularly updates operations and capital expenditures based on the best information available.

Each capital project cost estimate includes the yearly expenditures through completion based on the project's scope and schedule. The expenditures are monitored regularly and updated when necessary, e.g. expenditures are updated when a project's scope changes. A management review process is enforced to ensure only justified expenditure changes are approved.

Operations cost projections for the next 15 years are updated annually and are based on assumptions derived from Valley Water's strategic plans, including the impact of completed capital projects. Capital and operations expenditure projections are the foundation for the development of Valley Water's budget.

Financial Analysis

Valley Water regularly performs financial analysis to comply with the Board's Financial Planning/Budgeting Policy. Valley Water uses sophisticated financial models to perform the analysis for each fund. The projected operation expenditures, capital expenditures, and revenues for the next ten years are incorporated into the financial models to analyze the health of each fund under various economic scenarios. This process assures that funds will be available when needed to implement the CIP.

The financial analysis generates alternatives for funding capital projects based on the available yearly revenues from all sources allocated to the capital program, and the debt financing capacity of each fund. The financial analysis establishes the parameters within which the capital project schedule is developed.

Debt Projections and Debt Ratios

Debt is managed at Valley Water depending on the type of business involved. The SCW program approved by the voters in 2012 includes the authority to issue debt against future revenue in order to accelerate completion of projects sooner. Debt service on outstanding benefit assessment debt is funded by benefit assessments levied on property owners in the county.

The water utility business, on the other hand, uses a combination of short-term and long-term debt financing in conjunction with pay-as-you-go financing to lessen impacts to the water rates caused by fluctuations in capital funding needs. In the 1984 general election, Measure B was passed by the voters, which gave Valley Water's Water Utility Enterprise the authority to issue bonds on an "as required" basis. Debt service on outstanding debt is paid from water revenues. Bond covenants stipulate that Valley Water must maintain a 1.25 debt coverage ratio on all parity bonds. The long-term financial analysis targets a debt coverage ratio of 2.0, which helps establish the parameters for capital planning that ensure bond covenants will be met.

Valley Water currently enjoys credit ratings that are among the highest for a water-related government entity in the state of California, which helps keep interest costs borne by Valley Water at a minimum.

Relationship between the Operating Budget and CIP

Whenever Valley Water commits to capital improvements, there is a potential for associated long-range commitments of operating funds. For example, if 20-year bonds are issued to finance capital needs, then the operating funds will need to budget debt service payments for the next two decades. For this reason, it is important to evaluate capital commitments in the context of their long-range operating impact.

In addition to the long-range debt service payments, some capital projects affect future operating budgets either positively or negatively due to an increase or decrease in maintenance and operation costs. Such impacts vary widely from project to project and are evaluated individually during the project development stage. Valley Water is committing to a potential change in the operating budget when a capital project is approved.

The projected debt service payments and the positive or negative operating budget impacts are important factors considered in Valley Water's financial analysis.

This chart identifies the operating budget impacts to each fund from projected debt service payments. The debt service payment in the Watershed Stream Stewardship Fund is a total of payments associated with each individual watershed.

Debt Payment Schedule ($K)

Fund	FY20	FY21	FY22	FY23	FY24	FY25
General Fund	476	474	473	472	472	-
Benefit Assessment Fund	11,153	11,162	11,090	11,086	11,087	5,757
Safe, Clean Water and Natural Flood Protection Fund	3,102	1,750	2,436	4,015	4,392	24,231
Water Utility Enterprise Fund	44,062	49,162	58,514	69,208	84,436	99,834
Information Technology Fund	-	-	-	-	-	-
TOTAL	58,793	62,547	72,513	84,781	100,387	129,821

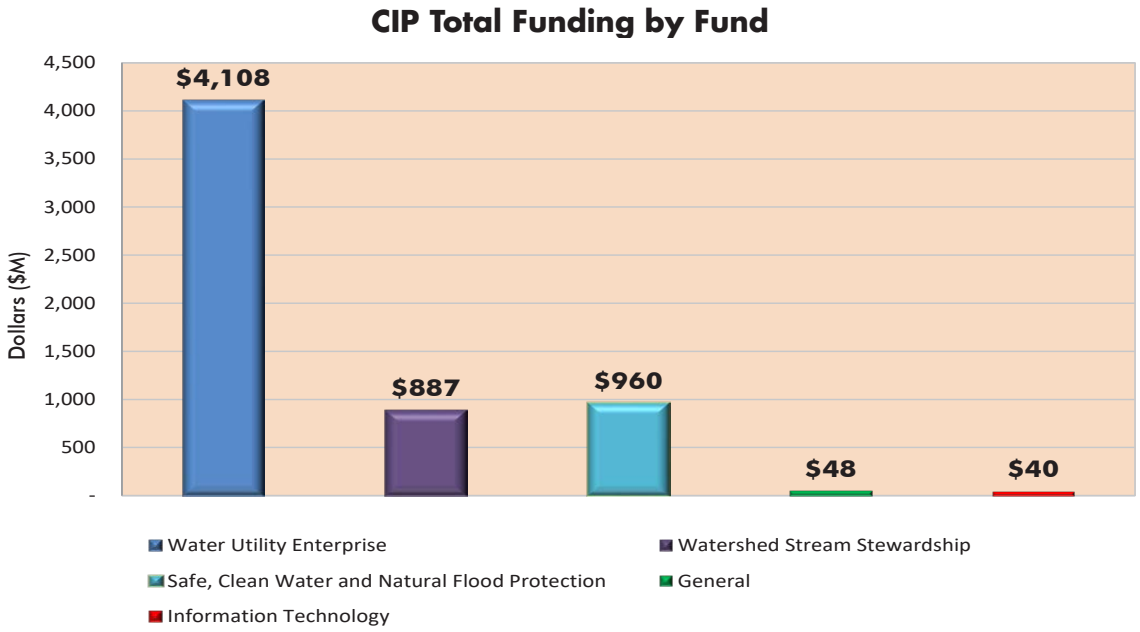
This chart identifies the net operating budget impacts to each fund resulting from annual maintenance and/or operating costs for newly completed capital projects. Additional information regarding operating impacts related to individual projects can be found on the project pages.

Estimated Operating Impacts ($K)

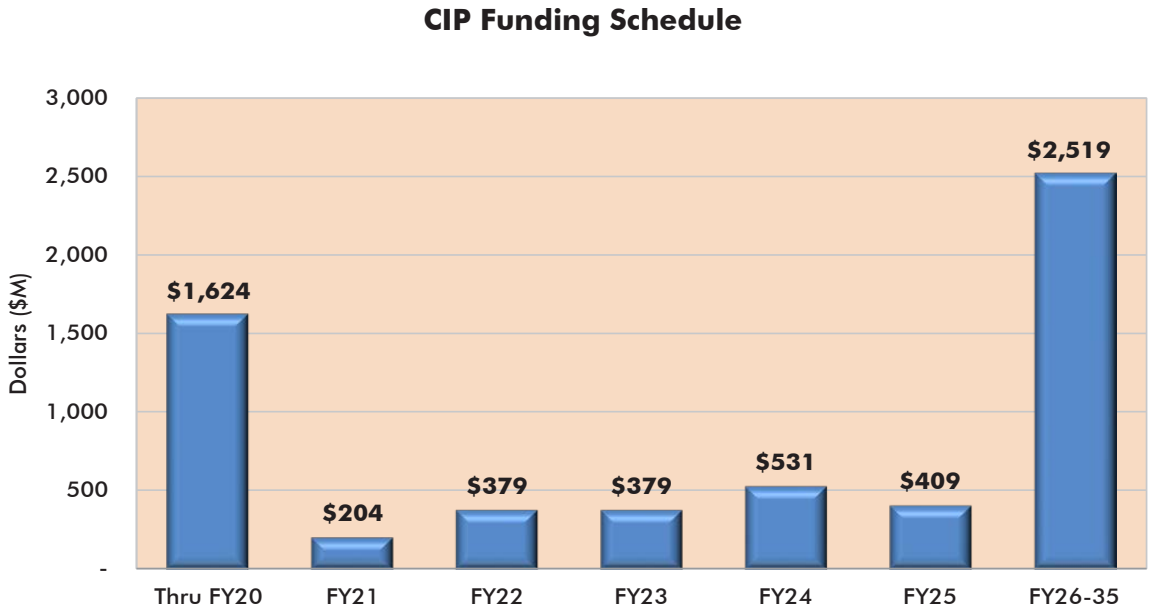
Fund	FY20	FY21	FY22	FY23	FY24	BEYOND
General Fund	-	-	-	-	-	-
Watershed Stream Stewardship Fund	500	526	741	766	(3,234)	766
Safe, Clean Water and Natural Flood Protection Fund	100	100	120	480	1,015	4,785
Water Utility Enterprise Fund	33	33	41	111	1,240	1,296
Information Technology Fund	-	178	199	383	184	190
TOTAL	633	837	1,101	1,740	(795)	7,037

CIP FUNDING SUMMARY

Of the $6.044 billion in total Valley Water funding for current and future projects, the Board appropriated $1.624 billion in prior years through June 30, 2020 (the end of Fiscal Year 2019-20). This year's CIP process identified additional funding needs of $4.421 billion to complete the projects in the CIP, with $204 million allocated in Fiscal Year 2020-21 and a total of $4.217 billion proposed for future years.



The needed $6.044 billion to implement the 67 capital projects as defined in the CIP are funded by five of Valley Water's funds.



This chart shows the funding schedule for the $6.044 billion to implement the 67 capital projects.

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K)

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
Almaden Dam Improvements	14,604	154	-	168	110	116	122	130	52,043	67,447
Anderson Dam Seismic Retrofit (C1)	50,061	12,879	760	10,109	2,757	58,596	53,433	53,919	334,491	576,245
Calero and Guadalupe Dams Seismic Retrofits	30,818	1,197	671	2,809	15,472	25,287	24,962	6,392	153,735	260,672
Coyote Pumping Plant ASD Replacement	1,234	1,027	324	2,431	5,932	4,136	648	83	-	15,491
Coyote Warehouse	6,878	2,482	21	284	77	69	-	-	-	9,790
Dam Seismic Stability Evaluation	21,605	631	-	426	5,513	463	486	447	879	30,450
Small Capital Improvements, San Felipe Reach 1-3	n/a	7,432	-	3,126	2,419	109	163	2,390	28,505	44,144
Pacheco Reservoir Expansion Project	17,260	35,106	6,214	27,784	42,068	35,875	243,308	232,878	711,070	1,345,349
10-Year Pipeline Rehabilitation (FY18-FY27)	37,854	17,385	1,544	17,223	11,337	8,317	5,410	5,105	8,939	111,570
Almaden Valley Pipeline Replacement Project	-	-	-	668	873	1,328	2,625	2,025	82,158	89,677
Distribution Systems Implementation Project	-	-	-	2,000	3,419	2,828	-	-	-	8,247
FAHCE Implementation	-	-	-	-	4,739	4,379	14,691	14,690	106,609	145,108
Pacheco/Santa Clara Conduit Right of Way Acquisition	2,827	-	547	503	1,756	323	-	-	-	5,409
SCADA Implementation Project	-	-	-	1,365	2,518	2,892	-	-	-	6,775
Small Capital Improvements, Raw Water Transmission	n/a	1,215	-	82	68	19	407	2,089	4,719	8,599
Small Capital Improvements, Treated Water Transmission	n/a	178	-	-	37	42	32	128	259	676
Treated Water Isolation Valves	529	742	1,245	-	-	-	1,994	283	5,597	9,145
Westside Retailer Interties	147	-	69	-	360	1,376	117	-	-	2,000
Vasona Pump Station Upgrade	1,380	525	-	1,217	20,116	463	85	-	-	23,786
PWTP Residuals Management	-	-	-	683	1,433	7,627	-	-	-	9,743
RWTP Residuals Remediation	43,573	2,632	7,304	10,316	3,919	3,648	675	-	-	64,763
RWTP Reliability Improvement	197,597	22,766	-	30,848	43,363	28,649	17,987	128	-	341,338
RWTP Treated Water Valves Upgrade	8,603	21	148	-	5	-	-	-	-	8,629
Small Capital Improvements, Water Treatment	n/a	11,353	-	3,035	3,863	1,269	5,732	3,392	27,229	55,873
STWTP Filter Media Replacement Project	-	203	-	444	2,934	5,081	1,793	-	-	10,455
Water Treatment Plant Electrical Improvement Project	-	203	-	447	3,423	5,860	2,056	-	-	11,989
WTP Implementation Project	-	-	-	1,024	3,505	4,052	-	-	-	8,581
Expedited Purified Water Program (EPWP)	23,869	2,480	2,639	-	1,265	1,736	8,797	10,194	655,972	704,313
Land Rights - South County Recycled Water PL	-	-	-	204	3,882	3,564	-	-	-	7,650
South County Recycled Water Pipeline	36,557	-	7,902	249	15,195	4,993	-	-	-	56,994

FY 2019-20 Funds to be reappropriated

CIP Project Funding Schedule for Water Utility Enterprise Fund ($K) continued

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
FAHCE Stevens Creek Fish Passage Enhancement - 90%	765	-	-	-	1,708	2,703	44	-	-	5,220
Project 1 Design & Construction (e.g. Metcalf Ponds)	-	-	-	-	2,205	2,315	2,431	11,710	12,074	30,735
Project 2 Construction (e.g. Ogier Ponds)	-	-	-	-	-	-	-	-	18,242	18,242
Capital Construction Mgmt System	-	977	877	156	110	-	-	-	-	1,243
WTP-WQL Network Equipment	2,723	185	-	-	94	1,475	2,985	854	3,747	12,063
TOTAL	498,884	121,773	30,265	117,601	206,475	219,590	390,983	346,837	2,206,268	4,108,411

FY 2019-20 Funds to be reappropriated

CIP Project Funding Schedule for Watershed and Stream Stewardship Fund ($K)

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
Palo Alto Flood Basin Tide Gate Structure Improvements	2,474	1,918	1,512	82	5,379	9,627	7,350	5,935	-	32,765
Permanente Creek, SF Bay to Foothill Expressway	17,541	-	178	-	-	-	-	-	-	17,541
San Francisquito Creek, SF Bay thru Searsville Dam	4,064	-	-	-	-	-	-	-	-	4,064
San Francisquito Creek, Early Implementation	1,614	-	-	-	-	-	-	-	-	1,614
Canoas Creek, Rodent Damage Repair	7,307	-	420	-	-	-	-	-	-	7,307
Guadalupe River Tasman Dr - I-880	90	1,000	9	1,828	2,824	2,499	29,215	30,732	30,892	99,080
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 1	50,191	-	3,362	-	-	-	-	-	-	50,191
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 2	62,075	-	1,541	45	923	162	-	-	-	63,205
Berryessa Ck, Lower Penitencia Ck to Calaveras Blvd Phs 3	-	-	-	-	-	-	-	-	71,236	71,236
Cunningham Flood Detention Certification	11,251	555	30	2	33	-	-	-	-	11,841
Lower Penitencia Ck Improvements, Berryessa to Coyote Cks.	9,297	1,989	1,038	7,743	7,817	637	328	-	-	27,811
Lower Silver Creek, I-680 to N. Babb Rd (Reach 4 Planning)	2,371	-	-	-	-	-	-	-	-	2,371
Lower Silver Creek, I-680 to Cunningham (Reach 4-6)	96,266	740	-	167	55	58	-	-	-	97,286
Lower Silver Creek, I-680 to Cunningham, Reimbursable (Reach 4-6)	2,912	-	765	-	-	-	-	-	-	2,912
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps	8,970	507	-	-	-	-	-	-	-	9,477
Upper Penitencia Ck, Coyote Ck-Dorel Dr, LERRDs	2,315	-	-	-	-	-	-	-	-	2,315
Llagas Creek–Lower, Capacity Restoration, Buena Vista Road to Pajaro River	6,947	-	2,809	-	-	3,404	3,401	-	-	13,752
San Francisco Bay Shoreline	16,788	33,432	-	11,143	22,316	1,820	34,551	128	133	120,311
San Francisco Bay Shoreline - Contribution	490	-	-	-	-	-	-	-	-	490
Shoreline Early Implementation	359	-	-	-	-	-	-	-	-	359
Watersheds Asset Rehabilitation Program	24,455	11,481	-	3,531	2,489	2,695	2,790	2,889	140,555	190,885
SMP Mitigation, Stream and Watershed Land Preservation	16,733	36	605	-	-	-	-	-	-	16,769
FAHCE Stevens Creek Fish Passage Enhancement - 10%	85	-	-	-	190	300	5	-	-	580
Stevens Creek Fish Barrier Removal - 100%	-	-	-	-	573	3,536	3,656	3,716	2,254	13,735
Project 2 Construction (e.g. Ogier Ponds)	-	-	-	-	-	-	-	-	18,246	18,246
Salt Ponds A5-11 Restoration	5,082	-	396	171	617	1,313	456	-	-	7,639
Watershed Habitat Enhancement Studies	2,372	704	380	532	-	-	-	-	-	3,608
TOTAL	352,049	52,362	13,045	25,244	43,216	26,051	81,752	43,400	263,316	887,390

FY 2019-20 Funds to be reappropriated

Project Funding Schedule for Safe, Clean Water and Natural Flood Protection Fund ($K)

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
IRP2 Additional Line Valves (A3)	1,090	399	671	633	1,902	27	2,522	2,592	2,773	11,938
Main & Madrone Pipelines Restoration (A1)	17,236	334	-	-	-	-	-	-	-	17,570
Permanente Creek, SF Bay to Foothill Expressway	81,789	7,560	301	-	-	-	-	-	-	89,349
San Francisquito Creek, SF Bay thru Searsville Dam (E5)	6,782	-	-	-	-	-	-	-	-	6,782
San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)	47,486	2,805	783	370	5,764	12,831	7,567	-	-	76,823
Sunnyvale East and West Channels	30,997	4,441	15,413	2,032	17,829	14,650	486	-	-	70,435
Guadalupe Rv–Upper, Fish Passage Mods	2,651	-	-	-	-	-	-	-	-	2,651
Guadalupe Rv–Upper, I-280 to SPRR (R6)	34,619	86	1,200	-	627	35	36	38	3,149	38,590
Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)	89,399	-	23,174	-	11,523	18,056	2,309	-	-	121,287
Guadalupe Rv–Upper, Actuals chg to other proj numbers	7,887	-	-	-	-	-	-	-	-	7,887
Berryessa Ck, Calaveras-I-680 - Corps	35,566	-	23	27	-	-	-	-	-	35,593
Berryessa Ck, Calaveras-I-680 - Reimbursable	18,986	1	-	-	-	-	-	-	-	18,987
Coyote Creek, Montague Expressway to Tully Road	14,098	941	1,014	2,197	7,100	21,186	19,117	1,691	-	66,330
Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)	1,910	1,305	1,261	1,381	2,774	232	2,201	1,711	13,485	24,999
Llagas Creek–Upper, Reimbursable (E6b)	43,057	1,983	-	-	-	-	-	-	-	45,040
Llagas Creek–Upper, Corps Coordination (E6a)	40,895	10,171	-	46,273	48,576	47,278	11,816	3,277	332	208,618
Llagas Creek–Upper, Technical Studies	1,446	-	-	-	-	-	-	-	-	1,446
Llagas Creek–Upper, Design	27,932	261	5,418	-	-	-	-	479	1,261	29,933
San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)	14,516	3,000	-	-	-	-	-	-	-	17,516
San Francisco Bay Shoreline - Other EIAs Planning (E7)	3,757	-	644	-	648	579	608	638	133	6,363
Hale Creek Enhancement Pilot Study (D6)	4,832	21	2,699	170	3,970	-	-	-	-	8,993
Almaden Lake Improvements (D4.1a)	4,554	1,153	1	1,709	15,832	8,523	-	-	-	31,771
South Bay Salt Ponds Restoration (D8)	548	-	256	-	-	-	-	1,897	1,953	4,398
SCW Fish Passage Improvements (D4.3; Bolsa, Evelyn, Singleton)	4,280	1,048	1,941	-	3,442	-	-	-	-	8,770
SCW Implementation Fund	-	-	-	-	2,127	1,184	218	-	-	3,529
Ogier Ponds Separation from Coyote Creek (D4.1b)	1,000	598	1,192	-	1,659	996	-	-	-	4,253
TOTAL	537,313	36,107	55,991	54,792	123,773	125,577	46,880	12,323	23,086	959,851

FY 2019-20 Funds to be reappropriated

Financial Planning and Summary

Project Funding Schedule for General Fund ($K)

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
Facility Management, Small Capital Improvements	n/a	2,063	-	3,016	2,984	3,000	3,000	3,000	15,000	32,063
Headquarters Operations Building	20	-	-	-	2,204	2,199	6,784	2,553	2,655	16,415
TOTAL	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478

FY 2019-20 Funds to be reappropriated

Project Funding Schedule for Information Technology Fund ($K)

PROJECT NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
Data Consolidation	1,023	60	-	75	77	-	-	-	-	1,235
IT Disaster Recovery	2,396	-	946	-	67	-	-	-	-	2,463
ERP System Implementation	14,608	-	3,361	2,256	251	263	-	-	-	17,378
Software Upgrades & Enhancements	2,403	781	-	871	398	2,190	1,388	459	8,581	17,071
Telephone System Voiceover IP	-	1,116	-	132	-	-	-	-	-	1,248
E-Discovery Management System	545	16	-	-	-	-	-	-	-	561
TOTAL	20,975	1,973	4,307	3,334	793	2,453	1,388	459	8,581	39,956

FY 2019-20 Funds to be reappropriated

CIP Funding Schedule Summary for All Funds ($K)

FUND NAME	Through FY19	FY20	FY20 Unspent	FY21	FY22	FY23	FY24	FY25	FY26-35	TOTAL
Water Utility Enterprise	498,884	121,773	30,265	117,601	206,475	219,590	390,983	346,837	2,206,268	4,108,411
Watershed Stream Stewardship	352,049	52,362	13,045	25,244	43,216	26,051	81,752	43,400	263,316	887,390
Safe, Clean Water and Natural Flood Protection	537,313	36,107	55,991	54,792	123,773	125,577	46,880	12,323	23,086	959,851
General	20	2,063	-	3,016	5,188	5,199	9,784	5,553	17,655	48,478
Information Technology	20,975	1,973	4,307	3,334	793	2,453	1,388	459	8,581	39,956
TOTAL	1,409,241	214,278	103,608	203,987	379,445	378,870	530,787	408,572	2,518,906	6,044,086

FY 2019-20 Funds to be reappropriated

Appendices

Appendix A - Valley Water Partnership Summary

Partnership Reimbursements are funds that are reimbursed by Valley Water's partners after Valley Water advances the needed funds. The following table identifies capital projects that are funded cooperatively with Valley Water's partners through reimbursements.

Partnership Reimbursement

FY 2021-35 Planned Capital Reimbursement Schedule

Project Number	Project Name	Agency	Claims On-hand (11/26/19)	Actuals Thru FY19	FY20	FY21	FY22	FY23	FY24	Future	Total
91214010	Small Capital Improvements, San Felipe - Rch 1	Total	0	2,168	339	1,258	453	314	24	6,070	10,626
		San Benito Water Dist		2,168	339	1,258	453	314	24	6,070	10,626
91954002	Pacheco Reservoir Expansion Project	Total	0	588	11,737	8,100	3,775	7,249	82,031	371,070	484,550
		California Water Commission		588	11,737	8,100	3,775	7,249	82,031	371,070	484,550
92144001	Pacheco/Santa Clara Conduit ROW Acquisition	Total	0	19	8	0	0	0	0	0	27
		San Benito Water Dist		19	8					0	27
92374005	SCADA Remote Architecture & Comm. Upg	Total	0	0	0	0	0	0	0	0	0
		San Benito Water Dist		0						0	0
91094007s	South County Recycled Water Pipeline	Total	0	2,106	2,000	2,000	0	0	0	0	6,106
		SCRWA		811						0	811
		USBR - ARRA		1,295						0	1,295
		USBR - Title 16		0	2,000	2,000				0	4,000
26154001s	Guadalupe River–Upper, I-280 - Blossom Hill Rd.	Total	1,682	32,349	1,419	0	0	0	0	0	33,768
		State Subventions	931	27,758	1,419					0	29,177
		City of San Jose	751	4,591						0	4,591
26174041s	Berryessa Ck, Calaveras Bvd to I-680	Total	2,708	7,292	6,266	826	0	0	0	0	14,384
		State Subventions		0	3,558	826				0	4,384
		DWR - Prop 1E	2,708	7,292	2,708					0	10,000
40174004	Berryessa Ck, Lwr Penitencia Ck - Calaveras Blvd.	Total	3,668	8,504	3,668	2,828	0	0	0	0	15,000
		DWR - Prop 1E	3,668	8,504	3,668	2,828				0	15,000
40264011	Cunningham Flood Detention Certification	Total	261	0	3,718	1,582	0	0	0	0	5,300
		DWR - Prop 1E	261	0	1,000					0	1,000
		NRCS			2,718	1,582				0	4,300
40334005	Lwr Penitencia Ck Imp, Berryessa to Coyote Cks.	Total	0	5,000	0	0	0	0	0	0	5,000
		DWR - Prop 1E	0	5,000						0	5,000
40264008s	Lwr Silver Ck, I-680 to Cunningham, Rchs 4-6	Total	0	50,408	0	3,378	0	0	0	0	53,786
		State Subventions		8,009		731				0	8,740
		DWR - Prop 1E		21,353		2,647				0	24,000
		NRCS-ARRA		20,676						0	20,676
		City of San Jose		370						0	370
50284010	Llagas Ck–Lwr, Capacity Restoration	Total	0	120	0	1,000	0	0	0	0	1,120
		State Subventions		120		1,000				0	1,120
26174051s	Llagas Creek–Upr, Buena Vista to Wright	Total	6,065	23,044	3,415	9,180	6,331	579	0	0	42,549
		State Subventions	6,065	19,703	3,415	9,180	6,331	579		0	39,208
		City of Morgan Hill		3,341						0	3,341
26244001	Permanente Creek, SF Bay to Foothill Expway	Total		911	112	0	0	0	0	0	1,023
		Cities of Mountain View and Los Altos		911	112					0	1,023
10284007s	San Francisquito Creek, SF Bay - Searsville Dam	Total	960	4,520	960	0	0	0	0	0	5,480
		JPA Member Agencies		4,520						0	4,520
		JPA (Joint Powers Authority)	960	0	960					0	960
26444001	San Francisco Bay Shoreline	Total		1,656	2,172	2,172	0	0	0	0	6,000
		SFBRA Measure AA (Grant)		1,656	2,172	2,172					6,000
00044026	San Francisco Bay Shoreline	Total		277	18,075	10,784	10,507	10,508	6,146	0	56,297
		SFBRA Measure AA (Grant)		0	17,798	10,507	10,507	10,508	6,146		55,466
		SFBRA Measure AA (Ballot Reimbursement)		277	277	277					831
26444002	San Francisco Bay Shoreline	Total		420	0	0	0	0	0	0	420
		State Bond - DWR		420							420
62084001	Watersheds Asset Rehabilitation Program	Total		227	0	0	0	0	0	0	227
		City of Palo Alto		227						0	227
		SUBTOTAL - Reimbursements from Current Projects	15,356	162,087	53,889	43,108	21,066	18,650	88,201	377,140	741,663

Partnership Reimbursement (cont'd)

Pending Reimbursements for Closed Projects			Claims	Actuals							
Project Number	Project Name	Agency	On-hand (01/14/18)	Thru FY19	FY20	FY21	FY22	FY23	FY23	Future	Total
91214001	Pacheco Conduit Inspection & Rehabilitation	Total	12	1,286	0	0	0	0	0	0	1,286
		San Benito Water Dist	12	1,500						0	1,500
91244001	Wolfe Road Recycled Water Pipeline	Total	0	12,201	0	0	0	0	0	0	12,201
		Apple Computer		4,800						0	4,800
		Cal Water		1,500						0	1,500
		City of Sunnyvale		2,101						0	2,101
		DWR - Prop 84		3,800						0	3,800
94384002	Penitencia Delivery Main Seismic Retrofit	Total	0	5,107	0	0	0	0	0	0	5,107
		Department of Water Resources (A3904)		5,107						0	5,107
92224001	Penitencia Force Main Seismic Retrofit	Total	0	3,884	19	0	0	0	0	0	3,903
		Department of Water Resources (A3904)		3,884	19					0	3,903
91184008	Silicon Valley Advanced Water Purification Ctr	Total	0	22,046	0	0	0	0	0	0	22,046
		City of San Jose		8,500						0	8,500
		DWR - Prop 50		2,935						0	2,935
		DWR - Prop 84		2,486						0	2,486
		USBR - ARRA		8,125						0	8,125
30154013s	Guadalupe River–DT, I-880 to I-280	Total	0	39,480	0	500	0	0	0	0	39,980
		State Subventions		27,618		500				0	28,118
		City of San Jose		1,654						0	1,654
		San Jose Redev Agency		10,208						0	10,208
		SUBTOTAL - Reimbursements for Closed Projects	0	84,004	19	500	0	0	0	0	84,523
		TOTAL REIMBURSEMENTS	15,356	246,091	53,908	43,608	21,066	18,650	88,201	377,140	826,186

Appendix A - Valley Water Partnership Summary

Partnership Funding is funds that are made available by Valley Water's partners, when needed. The following table identifies capital projects that receive partnership funding. This may occur through either cost sharing agreements or as in-kind services.

Partnership Funding

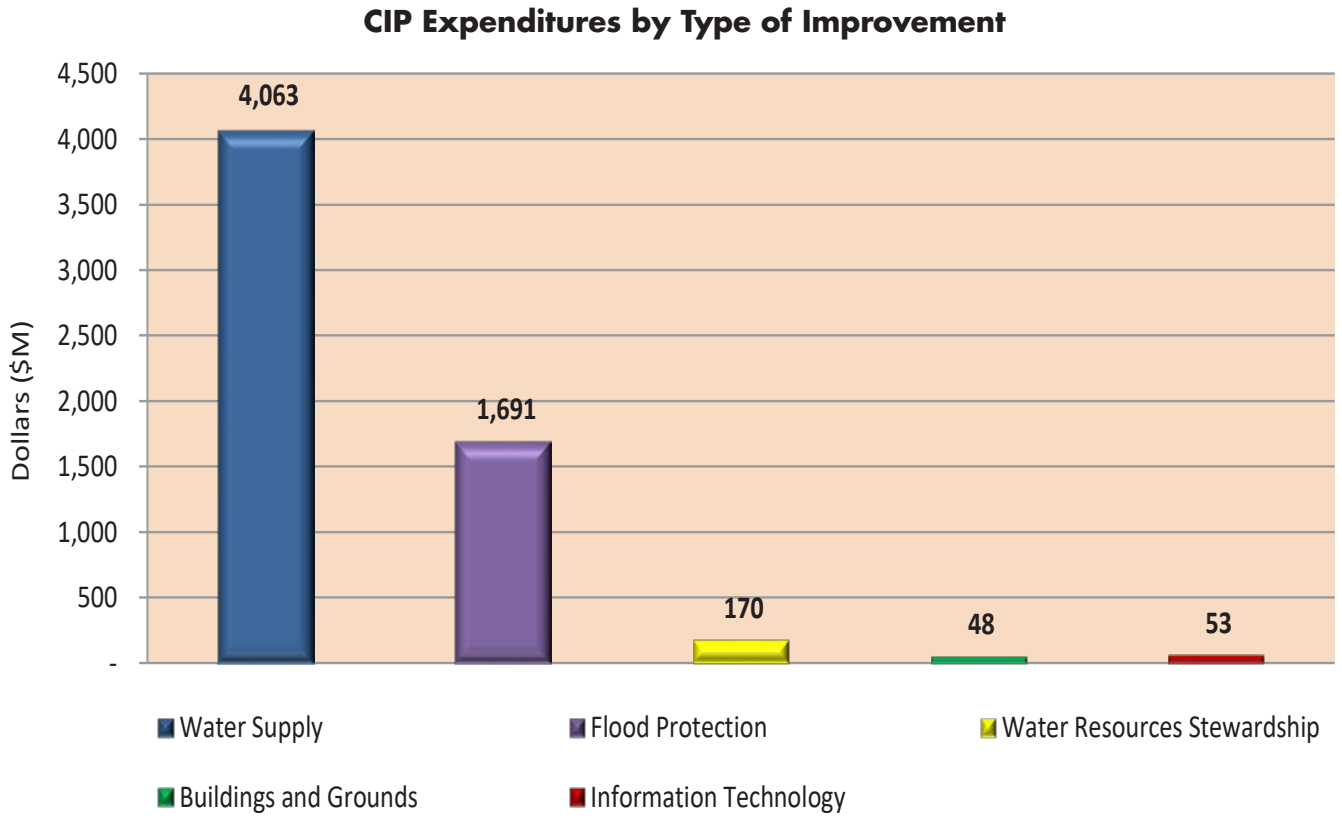
Project Number	Project Name	Amount ($K)	Partnering Agency
26174041s	Berryessa Creek, Calaveras Boulevard to Interstate 680	13,600	U.S. Army Corps of Engineers
26154001s	Guadalupe River–Upper, Interstate 280 to Blossom Hill Road	188,000	U.S. Army Corps of Engineers
26174051s	Llagas Creek–Upper, Buena Vista Road to Wright Avenue	65,000	U.S. Army Corps of Engineers
00044026s	San Francisco Bay Shoreline	91,250	USACE, Coastal Conservancy, US Fish & Wildlife, CA Wildlife Conservation, Packard-Hewlett-Goldman-Moore Foundations
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	3,000	U.S. Army Corps of Engineers
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	11,040	San Francisquito Joint Powers Authority (DWR)
10284007s	San Francisquito Creek, SF Bay thru Searsville Dam	1,500	County of San Mateo
40324003s	Upper Penitencia Creek, Coyote Creek to Dorel Drive	102,720	U.S. Army Corps of Engineers
	TOTAL	$ 476,110	

This page intentionally left blank.

Appendix B - Summary of Capital Expenditures

Expenditure Schedule by Type of Improvement ($K)

	THRU FY19 (Actuals)	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31-35	TOTAL
Water Supply	465,860	138,219	139,917	204,863	213,467	388,651	336,865	331,753	500,272	404,847	186,319	221,174	530,613	4,062,820
Flood Protection	711,524	143,310	111,391	154,542	137,425	123,051	48,507	42,634	16,768	38,028	34,655	34,480	94,611	1,690,926
Water Resources Stewardship	31,295	5,045	7,252	36,963	23,199	10,472	27,873	28,355	-	-	-	-	-	170,454
Buildings and Grounds	19	2,063	3,016	5,189	5,199	9,784	5,553	5,655	3,000	3,000	3,000	3,000	-	48,478
Information Technology	8,382	13,267	8,529	1,142	3,928	4,373	1,313	882	682	5,795	560	1,261	3,148	53,262
TOTAL	1,217,080	301,904	270,105	402,699	383,218	536,331	420,111	409,279	520,722	451,670	224,534	259,915	628,372	6,025,940

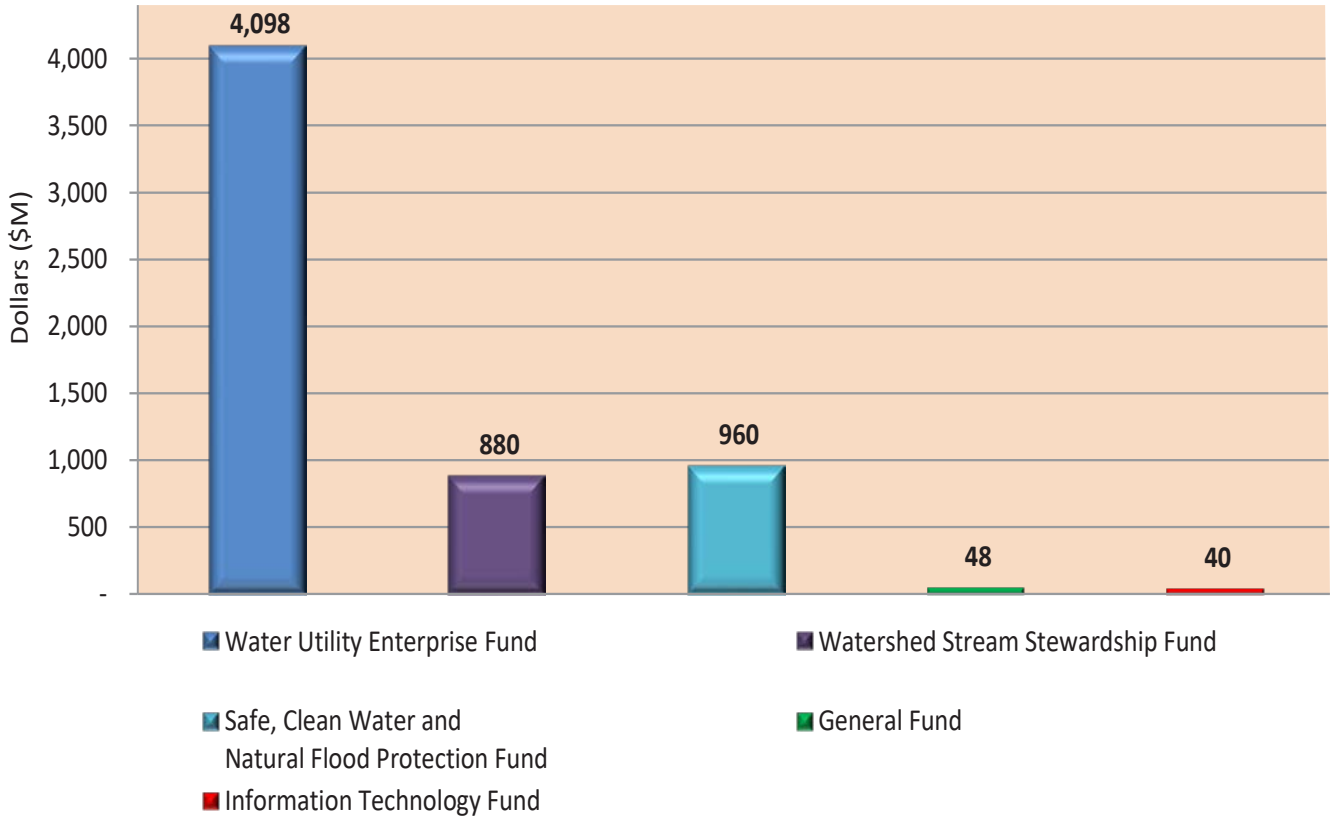


Appendix B - Summary of Capital Expenditures

Expenditure Schedule by Fund ($K)

	THRU FY19 (Actuals)	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31-35	TOTAL
Water Utility Enterprise Fund	450,377	139,087	139,646	208,180	221,090	393,412	352,112	347,493	500,319	406,329	186,879	221,829	531,214	4,097,967
Watershed Stream Stewardship Fund	331,416	59,953	31,629	45,917	27,669	83,576	48,675	44,543	12,513	33,086	32,705	33,649	94,611	879,942
Safe, Clean Water and Natural Flood Protection Fund	428,223	89,205	88,318	142,475	126,807	48,171	13,312	11,011	4,352	4,942	1,950	831	-	959,597
General Fund	19	2,063	3,016	5,189	5,199	9,784	5,553	5,655	3,000	3,000	3,000	3,000	-	48,478
Information Technology	7,045	11,596	7,496	938	2,453	1,388	459	577	538	4,313	-	606	2,547	39,956
TOTAL	1,217,080	301,904	270,105	402,699	383,218	536,331	420,111	409,279	520,722	451,670	224,534	259,915	628,372	6,025,940

CIP Expenditures by Fund



Appendix C - Safe Clean Water Project Schedules

The following tabel is an overview schedule for Safe, Clean Water Capital Projects identified in the FY 2021-25 CIP. Detailed information for each project can be found in this document in their respective chapters in the order presented in this table.

Safe, Clean Water Capital Improvement Project Schedules

Project Number	PROJECT NAME	FY00 - FY04	FY05 - FY09	FY10 - FY14	FY15 - FY19	FY20 - FY24	FY25 - FY29
	WATER SUPPLY						
91864005	Anderson Dam Seismic Retrofit (C1)						
26764001	IRP2 Additional Line Valves (A3)						
26564001	Main & Madrone Pipelines Restoration (A1)						
	FLOOD PROTECTION						
26244001	Permanente Creek, SF Bay to Foothill Expressway						
26284001	San Francisquito Creek, SF Bay thru Searsville Dam (E5)						
26284002	San Francisquito Creek - Construction, SF Bay to Middlefield Road (E5)						
26074002	Sunnyvale East and West Channels						
26154001	Guadalupe Rv–Upper, Fish Passage Mods						
26154002	Guadalupe Rv–Upper, I-280 to SPRR (R6)						
26154003	Guadalupe Rv–Upper, SPRR-Blossom Hill (R7-12)						
26174041	Berryessa Ck, Calaveras-I-680 - Corps						
26174042	Berryessa Ck, Calaveras-I-680 - Reimbursable						
26174043	Coyote Creek, Montague Expressway to Interstate 280						
26324001	Upper Penitencia Ck, Coyote Ck-Dorel Dr, Corps (E4)						
26174051	Llagas Creek–Upper, Reimbursable (E6b)						
26174052	Llagas Creek–Upper, Corps Coordination (E6a)						
26174054	Llagas Creek–Upper, Design						
00044026	San Francisco Bay Shoreline						
62044042	Shoreline Early Implementation						
26444001	San Francisco Bay Shoreline - EIA 11 Design & Partial Construction (E7)						
26444002	San Francisco Bay Shoreline - Other EIAs Planning (E7)						
	WATER RESOURCES STEWARDSHIP						
26044001	Almaden Lake Improvements (D4.1a)						
26164001	Hale Creek Enhancement Pilot Study (D6)						
26044002	SCW Fish Passage Improvements (D4.3; Bolsa Road)						
26044003	SCW Ogier Ponds Separation (D4.1b)						
26444003	South Bay Salt Ponds Restoration (D8)						

Legend

- Planning Phase
- Design Phase
- Construction Phase
- Close-out Phase

Appendix C - Safe Clean Water Project Schedules

This page intentionally left blank.

Appendix D - Glossary

Ad Valorem Tax
A tax based on value (e.g., a property tax).

Appropriation
An appropriation is a legal authorization granted by the Santa Clara County Board of Supervisors which allows Valley Water to expend cash and incur obligations for specific purposes. An appropriation is usually limited in amount and the time it may be expended.

Assessment
The process of setting the official valuation of property for taxation; the valuation placed upon property as a result of this process.

Asset
A probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events. Examples of assets are cash, receivables, and equipment.

BAO Board Appointed Officer

Benefit Assessment
Determination of the benefits derived from Valley Water activities within particular watersheds and levying a proportionate share of taxes to each parcel subject to voter-approved limitations.

Bonds
Bonds are a long-term source of debt that provides a source of borrowed monies that can be used to pay for specific capital facilities. Bonds are a written promise to pay a specified sum of money at a predetermined date or dates in the future, called the maturity date(s), together with periodic interest at a specific rate.

Capital Expenditure
Capital expenditures fall into several categories. In general, they should create assets or extend the useful lives of existing assets. The work product results in a long-term benefit greater than two years and for budgeting purposes involved a major expenditure of Valley Water resources greater than $50,000. They can be made with regard to tangible and intangible assets. The general categories of capital expenditures are: rehabilitation, major repairs, improvements/betterments/upgrades, replacements, expansions/additions, and ancillary expenditures.

Capital Projects
Projects are budgeted within the Capital budget and fall within the definition of Capital Expenditures; which means they (1) create or extend the life of an asset, (2) their work products have a useful life of greater than two years, and (3) they involve an expenditure of Valley Water resources in excess of $50,000.

Certificates of Participation (COPs)
A security in the general form of a bond, which evidences a proportionate participation in a flow of lease or other payments between two parties.

CEQA California Environmental Quality Act

CIP Capital Improvement Program

Cost Center
Cost Centers are separate financial accounting centers in which costs are accumulated because of legal and accounting requirements, the first two digits of a project number identifies the cost center.

COVID-19 Disease caused by novel Coronavirus, which has become a pandemic in 2020.

DPR Direct Potable Reuse

DWR State Department of Water Resources

EIR Environmental Impact Report

Encumbrances
Commitments related to unperformed (executory) contracts for goods or services. Encumbrances represent the estimated amount of expenditures that will result if unperformed contracts in process are completed.

Enterprise Fund
Enterprise Funds are used to account for operations including debt service (a) that are financed and operated in a manner similar to private business, where the intent of the government body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a accounting basis is financed or recovered primarily though user charges; or (b) where the governing body has determined that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control accountability, or other purposes.

ERP Enterprise Resource Planning

Expenditure/Expense
Decreases in net financial resources. Expenditures include current operating expenses requiring the present or future of net current assets, debt service and capital outlays, and intergovernmental grants, entitlements, and shared revenues. The major expenditure categories used by Valley Water are labor and overhead, land and structures, equipment, and debt service.

Facility
Defined as a creek, reservoir, dam, water treatment plant, pipeline, canal, etc.

Fixed Assets
Fixed Assets are defined as long-lived tangible assets such as automobiles, computers and software, furniture, communications equipment, hydrologic equipment, office equipment, and other equipment, with a value of $2,000 or more, or the combined value of like or related units (aggregate value) is greater than $5,000 if the unit value is less than $2,000.

Fiscal Year
A 12-month period to which the annual operating budget applies and at the end of which a government determines its financial position and the results of its operations. Valley Water's fiscal year is July 1 through June 30.

Fund
A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances, and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

General Fund
A fund used to account for major operating revenues and expenditures, except for those financial transactions that are required to be accounted for in another fund. General Fund revenues are derived primarily from property and other taxes.

Grants
Contributions or gifts of cash or other assets from another government entity to be used or expended for a specified purpose, activity, or facility.

HVAC Heating, Ventilation, and Air Conditioning

IPR Indirect Potable Reuse

JPA Joint Power Authority

KPI
Each project under the Safe, Clean Water Program has Key Performance Indicators (KPIs) that define the deliverables that are Valley Water's commitment to the voters. Safe, Clean Water Projects may have multiple KPIs and each KPI may result in separate or multiple projects within the Capital Improvement Program.

Levy
(1. Verb) To impose taxes, special assessments, or service charges for the support of government activities; (2. Noun) The total amount of taxes, special assessments, or service charges imposed by a government agency.

Long-Term Debt
Debt with a maturity date of more than one year after the date of issuance.

Appendix D - Glossary

MGD Million Gallons per Day

One-Percent Flood or 100-Year Flood

Has a 1% chance of occuring in a given year. Valley Water projects are usually designed for the 1% flood, a national standard established by the Federal Emergency Management Agency (FEMA).

Operating Expenditure

Operating expenditures are system costs required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services.

Operating expenditures are costs necessary to maintain the systems in good operating condition. This includes the repair and replacement of minor property components. The American Waterworks Association (AWWA) says that these priority components should be smaller than a retirement unit; a retirement unit is a readily separable and separately useful item that is part of a larger assembly. The benefit and life of such repairs should be less than two years. Any repairs that recur on an annual basis are considered operating activities of a maintenance nature.

Operating expenditures are often separated into fixed and variable costs for purposes of understanding operating leverage and structuring service charge rates.

Operations

Expenditures required for the daily process of providing water and watershed management services, including the administrative and overhead costs to support these services. Operations include work that is generally of an ongoing or recurring nature. Any Valley Water work that is not a project is, by definition, an Operation. Operations, although recurring, require close coordination and a high degree of management oversight; however, they can be accomplished without the application of the full range of tools and processes used for managing projects.

P3 Public Private Partnership

Projects

At Valley Water, a project is any undertaking which has (1) a beginning and an ending, and (2) is a one-time occurrence. Projects can require expenditure of capital or operating funds and, at Valley Water, are called Capital or Operating Projects, accordingly. Project usually, but not always, relate to a Valley Water facility or facilities (a creek, a reservoir, a dam, a water treatment plant, a pipeline,, etc.). Projects may include studies, design, construction, maintenance, or implementation of systems such as Records Management or Financial Management System.

Revenue

Monies Valley Water receives in exchange for services or sales provided. Revenue items include water sales, property tax revenues, benefit assessment revenues, interest income, intergovernmental reimbursement, and other.

Revenue Bonds

Bonds, whose principal and interest are payable exclusively from earnings of an enterprise fund. In addition to a pledge of revenues, such bonds sometimes contain a mortgage on the enterprise fund's property.

Reserve

An account used to indicate that a portion of a fund's assets are legally restricted for a specific purpose and is, therefore, not available for general appropriation.

SCADA

Supervisory Control and Data Acquisition

SCW

The Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water Program) is a countywide special parcel tax that was approved by voters on November 6, 2012 as a replacement to the Clean, Safe Creeks and Natural Flood Protection Plan. This Program combines the main operational areas of Valley Water in water supply, flood protection and stewardship, and represents an integrated approach to addressing community priorities. The 15-year Program became effective on July 1, 2013 and has a sunset date of June 30, 2028.

Appendix D - Glossary

WTP Water Treatment Plant

WQL Water Quality Lab

Valley Water

Clean Water • Healthy Environment • Flood Protection

Santa Clara Valley Water District
5750 Almaden Expressway, San José, CA 95118-3686
Phone: (408) 265-2600 Fax: (408) 266-0271
www.valleywater.org

© 2020 Santa Clara Valley Water District • 02/2020 • BA